

US 70 IMPROVEMENTS
From Four Lanes at Radio Island
to North of Beaufort Near Olga Road (SR 1429)
Beaufort, Carteret County
Federal-Aid Project No. STPNHF-70(43)
WBS No. 34528.1.1
State Project No. 8.1162501
TIP No. R-3307


**ADMINISTRATIVE ACTION
FINDING OF NO SIGNIFICANT IMPACT
PROGRAMMATIC SECTION 4(F) EVALUATION**

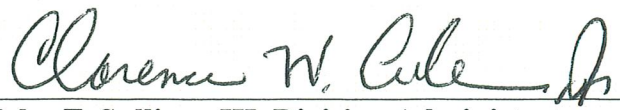
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AND
N. C. DEPARTMENT OF TRANSPORTATION

submitted pursuant to 42 U.S.C. 4332(2) (c)



APPROVED:

8/24/06
Date *for* 
Gregory J. Thorpe, Ph.D., Environmental Management Director
Project Development and Environmental Analysis Branch, NCDOT


9/7/06
Date *for* 
John F. Sullivan III, Division Administrator
Federal Highway Administration

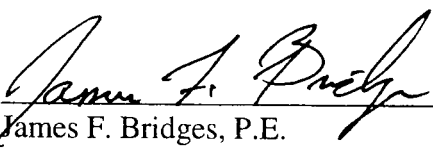
US 70
From Four Lanes at Radio Island
to North of Beaufort near Olga Road (SR 1429)
Beaufort, Carteret County
Federal-Aid Project No. STPNHF-70(43)
State Project No. 8.1162501
WBS No. 34528.1.1
TIP No. R-3307

ADMINISTRATIVE ACTION
FINDING OF NO SIGNIFICANT IMPACT

August 2006

Documentation Prepared in Project Development and Environmental Analysis Branch
By:


Undrea Major
Project Development Engineer


James F. Bridges, P.E.
Project Development Group Leader



JB 24 Aug 2006



TABLE OF CONTENTS

	PAGE
PROJECT COMMITMENTS.....	i
I. TYPE OF ACTION.....	1
II. DESCRIPTION OF THE PROPOSED ACTION.....	1
A. General Description.....	1
B. Selected Alternative.....	2
C. Proposed Cross Section.....	2
D. Right of Way and Access Control.....	3
E. Intersection Treatment	3
F. Design Speed.....	3
G. Estimated Project Cost and Schedule.....	4
III. SUMMARY OF PROJECT BENEFITS AND ENVIRONMENTAL EFFECTS.....	4
A. Project Benefits.....	4
B. Environmental Effects.....	4
C. Avoidance and Minimization of Environmental Effects.....	6
IV. ACTIONS REQUIRED BY OTHER AGENCIES.....	6
V. COORDINATION AND COMMENTS.....	7
A. Circulation of the Environmental Assessment.....	7
B. Comments Received on the Environmental Assessment.....	7
C. Comments Received During and Following the Public Hearing	14
D. NEPA/404 Merger Process.....	18
VI. REVISIONS TO THE ENVIRONMANETAL ASSESSMENT.....	19
A. Cost Estimates.....	19
B. Bridge/Culvert Recommendation.....	19
C. Historic Properties.....	19
D. Sidewalks.....	19
E. Federally-Protected Species.....	20
VII. BASIS FOR FINDING ON NO SIGNIFICANT IMPACT.....	20

APPENDIX

A – Figures

B – Correspondence

C – Merger / Concurrence Forms

D – Memorandum of Agreement

E – Programmatic Section 4(f)

F – Guidelines for Avoiding Impacts to the West Indian Manatee

PROJECT COMMITMENTS

US 70

From Four Lanes at Radio Island
to North of Beaufort near Olga Road (SR 1429)

Beaufort, Carteret County

Federal-Aid Project No. STPNHF-70(43)

State Project No. 8.1162501

TIP No. R-3307

WBS No. 34528.1.1

Roadway Design Unit/ Hydraulics Unit/ Roadside Environmental Unit/ Division 2

NCDOT's High Quality Water Guidelines (Design Standards in Sensitive Watersheds) will be implemented.

Roadway Design Unit/ Division 2

The project will include 3:1 fill slopes in wetland areas to eliminate the need for guardrail.

Roadway Design Unit/ Hydraulics Unit

NCDOT will remove of a portion of the causeway at Town Creek to aid the hydrology and ecological system for the area.

Division 2

NCDOT will implement the "Guidelines for Avoiding Impacts to the West Indian Manatee: Precautionary Measures for North Carolina Waters."

NCDOT "Best Management Practices for Bridge Demolition and Removal" will be implemented on this project.

Project Development & Environmental Analysis Branch/ Roadway Design Unit

NCDOT will coordinate the proposed design of the new bridge with N.C Maritime Museum officials to minimize the project's effect on the museum expansion site. (see Memorandum of Agreement).

Project Development & Environmental Analysis Branch

The measures outlined in the MOA and the Programmatic Section 4(f) Evaluation are recommended to minimize harm to Bridge #29 and the Beaufort Historic District. These include the following:

- North Carolina SHPO so there is a permanent record of the property. If, prior to the completion of the project, the Owners of the Carteret County Home donate the building for relocation to a qualified preservation organization, such as Preservation North Carolina, NCDOT will provide funding up to \$75,000 to the preservation organization to assist in the move of the building to a new site within Carteret County. In consideration of such assistance, the preservation organization shall ensure that covenants are placed on the building to require its rehabilitation and preservation in perpetuity.
- Prior to initiation of construction, NCDOT shall record the existing condition of Bridge # 29 and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan and submit the results to the North Carolina SHPO so there is a permanent record of the bridge.
- NCDOT in accordance with its Bridge Reuse and Relocation program, shall transfer Bridge #29 to the NC Maritime Museum. Up to the cost of what it would have cost NCDOT to demolish and remove the bridge, NCDOT shall be responsible for removing and delivering Bridge # 29 to a location specified by the museum.
- NCDOT shall ensure that an interpretative display, about the presence and history of Bridge # 29 on its original site and directions to its new site, is installed within the public use area.

Project Development & Environmental Analysis Branch/ Division 2

- The NCDOT, SHPO, and Museum will explore opportunities and other means, such as Transportation Enhancement funds, to further ensure the preservation of the bridge and its use as an educational element within the Museum's Gallants Channel campus.
- NCDOT will consult with the SHPO, Town of Beaufort, and North Carolina Wildlife Resources Commission (WRC) to develop and implement a plan for the future public use of the Bridge # 29 site, including approaches in the Town of Beaufort that constitute the US 70 right-of-way. Thereafter a Memorandum of Understanding (MOU) may be developed between NCDOT, Town of Beaufort, SHPO, and WRC, if it agrees to participate, to provide a detailed plan for future public use.

Roadway Design Unit

- As part of the subject project, improvements along Turner Street within the Beaufort Historic District will be completed within the existing right-of-way. No additional right-of-way will be obtained.
- No more than three lanes will result from any lane reconfigurations on Turner Street within the Beaufort Historic District.
- Bicycle travel will be accommodated by the use of 4-foot paved shoulders on roadway sections and 4-foot offsets with 54 in. bicycle safe railings.
- Any sections of existing sidewalk on Turner Street within the Beaufort Historic District affected by construction will be replaced.

Project Development & Environmental Analysis Branch/ Roadway Design Unit/ Structure Design Unit

- NCDOT will consult with the SHPO to address the design options and height for the proposed new bridge on Turner Street over Town Creek.
- NCDOT will consult with SHPO to address the design options for the proposed new bridge over Gallants Channel to limit visual and audible impacts on the National Register-listed Beaufort Historic District.

US 70
From Four Lanes at Radio Island
to North of Beaufort Near Olga Road (SR 1429)
Beaufort, Carteret County
Federal-Aid Project No. STPNHF-70(43)
State Project No. 8.1162501
WBS No. 34528.1.1
TIP No. R-3307

FINDING OF NO SIGNIFICANT IMPACT

Prepared by the
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
in consultation with the
Federal Highway Administration

I. TYPE OF ACTION

This is a Federal Highway Administration (FHWA) administrative action, Finding Of No Significant Impact (FONSI).

The North Carolina Department of Transportation and the FHWA have determined this project will not have any significant impact on the human environment. This FONSI is based on the October 2004 Environmental Assessment (EA) which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. The EA provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the EA.

II. DESCRIPTION OF THE PROPOSED ACTION

A. General Description

The North Carolina Department of Transportation (NCDOT) proposes to improve US 70 in the Beaufort area to a multilane facility (see Appendix, Figure 1). The project will replace the existing drawbridge over Gallants Channel with a high-rise bridge and improve US 70 to a multilane facility from the existing four lanes at Radio Island to near Olga Road (SR 1426), a length of 3.7 miles (5.9 kilometers). These improvements are proposed to reduce travel delays occurring at the drawbridge and to increase the traffic carrying capacity of US 70 through the town of Beaufort.

The proposed project is included in the approved 2006-2012 Transportation Improvement Program (TIP). Right of way acquisition is scheduled to begin in FFY 2008 and construction is post year (beyond FFY 2012).

B. Selected Alternative

The recommended alternative, 2D, replaces the existing drawbridge with a four-lane high-rise bridge to the north of the harbor of refuge at Gallants Channel. The proposed bridge is 3362 feet long and provides 65 feet of navigational clearance. This alternative includes a four-lane median-divided roadway around the perimeter of the airport that connects with existing West Beaufort Road. West Beaufort Road will be dead-ended and will not intersect with US 70. Alternative 2D proceeds on new location from its intersection with Turner Street near Stanton Road to east of NC 101. From NC 101, 2D continues on new location to north of Shell Landing Road (SR 1301). The remainder of the project extends on the existing US 70 to north of Beaufort near Olga Road (SR 1429).

C. Proposed Cross Sections

1. Proposed Bridge over Gallants Channel

The proposed bridge typical section provides a 21-meter (70-foot), four-lane divided roadway with four 3.6-meter (12-foot) travel lanes, 2.4-meter (8-foot) bridge offsets, a 1.2-meter (4-foot) raised island, and .3-meter (1-foot) offsets on each side.

2. US 70

The proposed typical section for US 70 (Alternative 2D) provides a 22.8-meter (76-foot), four-lane divided facility throughout the entire length of the project. This typical section includes 3.6-meter (12-foot) travel lanes, a 6-meter (20-foot) raised grass median, and 1.2-meter (4-foot) paved outside shoulders for the new location portion of the project. The project proposes curb and gutter from the intersection of the new location portion with the existing US 70 to the eastern project terminus.

3. Turner Street

The proposed connector using existing Turner Street includes a 12-meter (40-foot), three-lane curb and gutter section with two 3.6-meter (12-foot) travel lanes, and a 3.6-meter (12-foot) center turn lane. A 177 meter (580-foot) bridge with 2.4meter (8-foot) offsets is proposed along Turner Street. Existing sidewalk that is disturbed during construction will be replaced. Construction within the historic district will be contained within the existing right of way.

4. Bicycle and Pedestrian Accommodations

This segment of US 70 is listed in the Incidental Bicycle and Pedestrian Needs section of the 2006 – 2012 TIP, indicating bicycle and pedestrian accommodations should be considered for inclusion in the roadway improvement project. The proposed facility includes shared bicycle accommodations along US 70. AASHTO's standard 1.2-meter (4-foot) paved shoulders are proposed. The proposed Gallants Channel Bridge includes 1.2-meter (4-foot) offsets and 1372-millimeter (54-inch) bicycle safe railings.

Existing sidewalks disturbed during construction will be replaced along both sides of Turner Street. No new sidewalk is proposed for Turner Street.

D. Right Of Way and Access Control

The selected alternative (Alternative 2D) has a proposed right of way for the shoulder section that varies from 39 to 60 meters (130 to 200 feet). Limited control of access is proposed along the new location portion of the selected alternative. This is defined as connections to a facility via ramps and interchanges and at grade intersections. No private driveway connections will be permitted. A control of access fence will be placed along the facility with openings provided at intersections. The project proposes curb and gutter from the intersection of the new location portion with the existing US 70 to the ending terminus of the project. The proposed right of way for the curb and gutter section is 29 meters (95 feet). Temporary construction easements are needed along the curb and gutter section.

Construction along Turner Street will be contained within the existing right of way within the historic district. Additional right of way will be acquired outside of the historic district limits.

E. Intersection Treatment

All intersecting roads will remain at grade. Traffic signals are proposed at the intersections with Turner Street (SR 1174), NC 101, and existing US 70. The existing stop sign and traffic signal control will be maintained at the remaining intersections.

F. Design Speed

The project will be designed to meet design speeds of 80 km/h (50 mph) and 100 km/h (60 mph) for curb and gutter sections and shoulder sections respectively. Design speed is a correlation of the physical features of a highway, which influence vehicle operation and reflect the degree of safety and mobility desired along a highway. Design speed is not to be interpreted as the recommended or posted speed.

G. Estimated Project Cost and Schedule

The project is included in the approved 2006-2012 Transportation Improvement Program (TIP). The current estimated TIP cost is \$64,550,000, which includes \$21,250,000 for right of way acquisition, and \$43,300,000 for construction. Current cost estimates can be found in Table 1 of this document. The project is scheduled for right of way acquisition to begin in fiscal year (FY) 2008 and construction to begin after 2012.

III. SUMMARY OF PROJECT BENEFITS AND ENVIRONMENTAL EFFECTS

A. Project Benefits

The proposed project is expected to improve traffic movement, reduce accidents, reduce delays, and increase accessibility within this area of the County. These improvements will benefit the region by increasing convenience and ease of travel for US 70 between Morehead City and eastern Carteret County.

B. Environmental Effects

No impacts to archaeological resources will occur. No federally-protected species will be affected by the project. No noise abatement measures are recommended due to design constraints. Residential and business relocations are estimated at 55 and 9 respectively. Wetland impacts total 13.8 acres. Alternative 2D will have an adverse effect on the Carteret County Home and the existing Grayden Paul Bridge. Mitigative measures for these historic resources are addressed in the Memorandum of Agreement approved by the State Historic Preservation Office, FHWA, and recorded with the Advisory Council on Historic Preservation.

Summaries of the environmental effects are shown in Table 1. Wetland and stream impacts are shown in Table 2. The tables reflect more detailed design that has been developed since the approval of the Environmental Assessment.

Table 1: Summary of Environmental Effects

	Alternative 2D
Cost	
Right of Way	\$21,250,000
Construction	\$46,700,000
Mitigation	\$ 653,000
Total	\$68,603,000
Relocatees	
Residences	55
Businesses	9
NonProfit	0
Total	64
Section 4(f) Resources	Paul en Paul Bridge
Historic Property Effects	
Paul en Paul Bridge	Adverse Effect
Beaufort Historic District	No Adverse Effect
Carteret County Home	Adverse Effect
Stream Impacts	None
Wetland Impacts	
Salt Marsh (CAMA)	1.13 ac
Freshwater (404)	12.48 ac
Total Wetlands	13.61 ac
Noise Receptors Impacted	29

Table 2: Anticipated Impacts to Wetlands and Surface Waters.

Wetland	Alternative 2D
Site	Acres
A	0.51
B	0
C	0
D	1.11
E	0.02
F	0.04
G	0.3
H	0.03
I	0.09
J	0.19
K	0.01
L	0.12
M	0.05
N	0
O	11.14
P	0
Q	0
TOTAL	13.61
Causeway Removal: approximately 170m (560-ft)	

These impacts were revised based on the current design. (See Figure 2A & 2B)

C. Avoidance and Minimization of Environmental Effects

- Major streams (Gallants Channel, Town Creek, and tributary to Turner Creek) will be bridged.
- Wetland impacts were minimized by the selection of Alternative 2D.
- Other avoidance and minimization efforts have taken place throughout development of this project to protect the human environment as well. This included avoidance of the historic district and minimization of impact to the Carteret County Home and the existing Grayden Paul Bridge.
- Minimization of the impact to businesses and residences had strong influence on alternative alignments. Alternative 2D was adjusted to minimize impacts to residents along the project corridor.
- The removal of a portion of the causeway located at Turner Street will help restoration/mitigation by re-establishing hydraulic connectivity. This decision was agreed upon to restore and enhance the hydrology and ecological system in the area.

IV. ACTIONS REQUIRED BY OTHER AGENCIES

In accordance with provisions Section 404 of the Clean Water Act, a permit will be required from the U. S. Army Corps of Engineers (COE) for discharge of dredge or fill material into "Waters of the United States." Due to potential wetland and stream impacts, an individual permit may be necessary for this project. Final decisions concerning applicable permits rest with the US Army Corps of Engineers. This project will require a 401 Water Quality Certification from the N. C. Department of Environment and Natural Resources, Division of Water Quality (DWQ).

Federal law prohibits the construction of any bridge across the navigable waters of the United States unless first authorized by the Coast Guard. A US Coast Guard Bridge Permit must be approved prior to construction of the new bridge.

The Coastal Area Management Act requires a permit if a project is located in one of the 20 counties covered by CAMA, is in or affects an area of environmental concern (designated by the Coastal Resources Commission), and is considered development under the terms of the act and does not qualify for an exemption. A CAMA permit will be required for this project.

The National Marine Fisheries Service (NMFS) requested an Essential Fish Habitat Study for the project. NCDOT submitted an Essential Fish Habitat Report to the National Marine Fisheries Service April 12, 2005. The National Marine Fisheries Service stated their agency is satisfied with the Essential Fish Habitat Report and also concurs with the removal of a portion of the causeway at Turner Street to serve as mitigation and restoration of a pristine environmental system (personal communication with NMFS, June 23, 2006).

V. COORDINATION AND COMMENTS

A. Circulation of the Environmental Assessment

The Environmental Assessment was approved by the North Carolina Department of Transportation and the Federal Highway Administration on October 20, 2004. The approved EA was sent to the following federal, state and local agencies for review and comment. An asterisk indicates a response was received from that agency.

- * Environmental Protection Agency
- Dept of Homeland Security
- * US Coast Guard
- U.S. Army Corps of Engineers-Wilmington
- * U.S. Fish and Wildlife Service-Raleigh
- National Marine Fisheries Service
- * N.C. State Clearinghouse
- * N.C. Department of Environment and Natural Resources
- * N.C. Wildlife Resources Commission
- * Division of Water Quality
- * Division of Environmental Health
- * Division of Marine Fisheries
- * Division of Coastal Management
- N.C. Department of Cultural Resources
- * State Historic Preservation Office
- N.C. Department of Public Instruction
- * Carteret County Board of Commissioners
- Town of Beaufort

B. Comments Received on the Environmental Assessment

Written comments on the Environmental Assessment were received from several agencies. The following are excerpts of the substantive comments with responses, where appropriate.

1. US Environmental Protection Agency

Comment:

"The EA addresses improvements to Turner Street which is believed to be partially a gravel road through the marsh area adjacent to the "Harbor of Refuge". EPA views the proposed roadway improvements as a possible opportunity for restoration/mitigation by re-establishing hydraulic connectivity. EPA would request that NCDOT explore this opportunity further by considering bridging a part of the Turner Street section of improvements in the marsh area."

Response:

NCDOT will remove approximately 560 ft. of the causeway at Turner Street to aid the hydrology and ecological system for the area. A bridge will be included for this section of Turner Street.

2. US Army Corps of Engineers

Comment:

“The references to Nationwide Permit 26 should be deleted. This permit has been replaced and is no longer valid. The limitations/thresholds on Nationwide Permit 14 have changed since the EA was prepared. The Nationwide Permit Regional Conditions for North Carolina require notification and mitigation for stream impacts exceeding 150 linear feet of perennial or intermittent channel with important aquatic function or .10 acre of wetland impact. Maximum thresholds are 300 linear feet of channel or .50 acre of wetland impact.”

Response:

This comment has been noted. The permit application will reflect all adjustments to new requirements.

Comment:

“Impacts to palustrine forested wetlands should be avoided and/or minimized to the maximum extent practicable. Additional overflow culverts may be required to insure that floodplain wetlands remain hydraulically connected to the stream channel.”

Response:

In the current design plan, avoidance of wetlands has taken place where practicable. Because avoidance was not practicable in every instance, impacts to wetlands were minimized to the maximum extent practicable. The implementation of a new bridge over Town Creek in lieu of a culvert will greatly improve the connectivity of the wetland systems to the east and west of Turner Street.

3. US Department Of The Interior – Fish And Wildlife Service

Comment:

“We recommend replacing the existing culvert with a bridge and removal of the causeway.”

Response:

The existing metal pipes at Town Creek will be replaced with a bridge 580-feet long and 64-feet wide. NCDOT has agreed to the removal of a portion of the causeway to aid the hydrology and ecological system for the area.

4. NC Wildlife Resources Commission

Comment:

“The EA should contain a record of stream impacts for each alternative. Table five of the document does not contain this information, nor is it addressed in section VI.D of the document. If no stream impacts exist for this project, it should be stated ”

Response:

No Stream impacts are anticipated for this project.

5. NC DENR-Division of Water Quality

Comment:

“Where streams must be crossed, DWQ would prefer that a bridge be used in lieu of culverts. However we realize that economic considerations often require the use of culverts. Culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, DOT should not install the bridge bents in the creek, to the maximum extent possible.”

Response:

The replacement of the metal pipes at Town Creek is now proposed as a new bridge 580-feet long and 64-feet in width. NCDOT has agreed to the removal of a portion of the causeway to aid the hydrology and ecological system for the area. Bridge bent location may be further discussed with the Division of Water Quality at future hydraulic coordination meetings (concurrence points 4B and 4C).

Comment:

“Sediment and erosion measures should not be placed in wetlands.”

Response:

NCDOT will ensure the use effective sediment and erosion control measures during construction, including but not limited to silt fences and sediment basins. Proper installation and adequate maintenance of control measures will be addressed to maximize effectiveness. The timely cover of cleared land (temporary or permanent) will be emphasized. In an area where the roadway fill is in a wetland, NCDOT will implement erosion control measures that have a minimal footprint and do not require excavation to construct.

Comment:

Future documentation should continue to include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.

Response:

Your comment has been noted. See table 1 and 2 of this document as well as Appendix A for mapping.

Comment:

An analysis of secondary and cumulative impacts anticipated as a result of this project is required. The type and detail of analysis should conform to the NC Division of Water Quality Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.

Response:

An indirect and cumulative effects report will be completed by NCDOT. The report and/or details of the analysis will be available prior to the permitting phase of this project.

Comment:

There should be a discussion on mitigation plans for unavoidable impacts. If mitigation is required, it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. While the NCDWQ realizes this may not always be practical, it should be noted that for projects requiring mitigation, appropriate mitigation plans will be required in conjunction with the issuance of a 401 Water Quality Certification.

Response:

The partial removal of a portion of the causeway at the proposed bridge along Turner Street will provide one form of onsite mitigation. There is potential for additional onsite mitigation. Appropriate mitigation plans will be submitted prior to the application a 401 Water Quality Certificate.

6. NC DENR-Division of Marine Fisheries

Comment:

“There appears to be no significant impact to fisheries habitat (salt marsh) with any of the alternatives. Possible mitigation sites are addressed in the EA for loss of salt marsh. However, NCDMF is concerned about the accessibility to fishing waters by commercial and recreational fishermen. The NCDMF would like to see how water quality impacts such as increased runoff from the bridge and roadway would be minimized better addressed in the EA.”

Response:

Access that is discontinued due to the design of the project will be replaced to allow commercial and recreational fishermen adequate accessibility to fishing waters. The high rise bridge over Gallants Channel will include a deck drainage system in the design. Due to design constraints, the Turner Street bridge will not have a deck drainage system.

7. NC DENR-Division of Coastal Management

Comment:

“Field verification of wetland delineations need to be made with representatives of USACE, DWQ and DCM to ensure accurate identification and quantification of jurisdictional wetlands.”

Response:

Field verification of wetlands is currently being coordinated with the appropriate agencies. Re-verification of wetlands will take place every five years.

Comment:

“The NCDOT document “Best Management Practices for Bridge Demolition and Removal” was developed in coordination with the USACE, the NC Wildlife Resources Commission, the National Marine Fisheries Service, and others with the goal of establishing a consistent, environmentally sound approach

to the demolition and removal of bridges. Adhering to this document will be a condition of the CAMA major permit for this project.”

Response:

NCDOT “Best Management Practices for Bridge Demolition and Removal” will be implemented on this project.

Comment:

DCM will only agree with the use of 3:1 side slopes in wetland areas, provided that NCDOT can supply adequate documentation to demonstrate that the maintenance and construction of 2:1 side slopes is not feasible. Documentation may include a description of the type of fill material to be used and the stability of the ground surface where the fill material will be placed. Documentation may also include a description of NCDOT’s experience constructing and maintaining 2:1 side slopes under similar circumstances.

Response:

Your comment has been noted. Details of the construction of side slopes will be further discussed during the Concurrence Point 4B and 4C hydraulic meetings of the interagency merger team.

Comment:

A portion of the project is located in a High Quality Water (HQW) Zone as designated by the NC Division of Water Quality. The Sedimentation Control Commission has increased standards for projects in HQW zones. The stricter NC Division of Land Quality rules, 15ANCAC 04B .0124, Design Standards for Sensitive Watersheds, apply. Reference was made to a commitment to implement these guidelines on pages 54 and 56; however, there was no reference to the guidelines in the “Green Sheet”. These guidelines should be referenced as a project commitment.

Response:

NCDOT’s High Quality Water Guidelines (Design Standards in Sensitive Watersheds) will be implemented for this project. The commitment has been added to the Project Commitments (Green Sheets) detailed previously in this document.

Comment:

The level of service (LOS) for the design year is provided in Table 6; however, the LOS for the “no build” alternative is not provided for sections 1, 2, and 6. It is stated that the “no build” alternative LOS ranges from LOS D to LOS

F. There is no explanation for the missing data in Table 6 on page 16. This data or an explanation for the missing data should be provided.

Response:

It should be noted that sections 1, 2, and 6 on page 16 of the data table in the EA were associated with segments of the alternates proposed for new location. Therefore "No Build" data is not applicable for these segments.

Comment:

Beaufort Elementary School moved next to the Beaufort Middle School on Carraway Drive and the speed limits referenced in this section are outdated. There should be a discussion of the traffic cops that are required every day that school is in session. This is important because Alternatives 1E and 2E bring the new US 70 into the existing US 70 route, with an intersection within a few hundred feet of school entrances. This is also the area of the project with the most traffic accidents. The traffic conditions would be exacerbated with the merging of higher speed traffic into the existing school zone.

Response:

The potential traffic concerns from the implementation of the new location facility intersection within the vicinity of the schools mentioned and other high volume trip generators, such as the Food Lion, the Post Office and Beaufort Christian Academy provided more information to consider in the alternate selection process. The ultimate result was the selection of alternative 2D. The 2D alternative intersects with existing US 70 north of these properties and will not have a significant impact to the current traffic condition for the area in question.

Comment:

Freshwater wetlands listed in the document should be subdivided into more detailed categories where the delineations list wetlands. Converted wetlands, no longer functioning as natural wetlands or affected by existing ditches should be listed. Many of these areas are ditched and cleared. Outdated delineations appear to have more wetland impacts than would actually occur and may not accurately indicate the wetland impacts of each alternative.

Response:

Specific comparisons regarding wetland quality associated with different project alternatives were discussed by the interagency merger team prior to the selection of alternative 2D. The alternate selection took into consideration the degraded wetlands mentioned in the comment above.

8. NC Department of Cultural Resources

Comment:

A letter from NC Cultural Resources State Historic Preservation Office (SHPO) dated January 12, 2005 states “the EA accurately reflects the findings of effect for the resources on the proposed project (see letter in Appendix B):

- Alternates 1A and 1E adversely affect the Beaufort Historic District and the Carteret County Home, properties listed on the National Register of Historic Places.
- Alternates 2A, 2D, and 2E will not adversely affect the Beaufort Historic District, but will adversely affect the Carteret County Home.
- The project alternatives will not affect the J.C. Stanley Grocery, Scotts Grocery, and the Ward Hancock House.
- The project will not affect the National Register-eligible Bridge No. 29 over Gallants Channel, if it is left in place. Removal of the bridge would be an adverse effect on the bridge and historic district

Given the findings of effect for the project, we recommend selection of Alternate 2A, 2D, or 2E.

Response:

NCDOT has coordinated with the NC Department of Cultural Resources to develop a Memorandum of Agreement (MOA) between NCDOT, FHWA, SHPO and the Town of Beaufort. The MOA addresses the concerns and incorporates the recommendations made by NC Department of Cultural Resources. The Draft MOA is located in Appendix D of this document.

C. Comments Received During and Following the Public Hearing

NCDOT held a combined public hearing on December 7, 2004 at East Carteret High School located in Beaufort. An open house was conducted from 4:00 pm to 6:30 pm and a formal hearing from 7:00 pm to 8:30 pm. Approximately 200 people attended.

The property owners and residents that attended the public hearing had varied opinions about the project. Much of the hearing centered on right of way and relocation procedures, and projected traffic volumes. Public concerns involved the effect the proposed traffic would have on neighboring thoroughfares and downtown Beaufort. NCDOT representatives addressed questions and concerns at the hearing. The major public concern was identifying the Least Environmentally Damaging Practicable Alternative (LEDPA).

1. The following is a representative summary of the Public Hearing Comments:

The Town of Beaufort stated the following concerns:

Comment: The Town is aware of a need to address present and future traffic problems. The town is concerned the new bridge may have a negative impact on the Town of Beaufort. The northern most route would impact the NC Maritime Museum Expansion site and a rapidly developing subdivision. NCDOT should work closely with the Town of Beaufort with sincere interest in the local concerns.

Response: NCDOT has had thorough coordination with the Town of Beaufort and Carteret County concerning this project. In 2001, town officials and the county board of commissioners submitted separate resolutions supporting the northern most alternative for this project. In interim years, there has been continued coordination and discussions to aid in the determination of a final design that would be practicable. The alternative selected is the Least Environmentally Damaging Practicable Alternative (LEDPA).

Comment: NCDOT should adopt the alternative that has the least negative effect on historic resources in Beaufort's National Register and local historic district. A better solution to reduce the adverse effects on the Carteret County Home should be found.

Response: Though the historic resources in Beaufort's National Register and local historic district have been considered in this process, they are not the sole criteria for determining the optimal alternative. Other factors such as impacts to wetlands, water quality, and effects on the Beaufort Morehead City Airport also influenced the decision of which alternative could be selected. The State Historic Preservation Office has been consulted at every stage of the planning process to minimize impacts to all historic properties including the Carteret County Home.

Comment: The traffic will worsen in the coming years in Beaufort. Beaufort is becoming a destination for tourists and the NCDOT needs to start addressing the problems now.

Response: Over time, the anticipated increase in population will affect the traffic in Beaufort. The proposed project is a part of an overall thoroughfare plan to address future traffic needs for local traffic and traffic generated through tourism. The proposed project has been designed to effectively handle increases in traffic projected through 2025.

Comment: The Beaufort Business Association opposes any construction of a planned

replacement bridge that will impose on the future expansion and development of the museum's annex and does not meet the height requirements of Jarret Bay.

Response: NCDOT will construct a bridge that meets the height standard of the United States Coast Guard.

Comment: The alternatives will triple the amount of time that it takes to get emergency response vehicles and fire trucks from fire stations to Piver's Island. The Newport River Bridge is only one lane in each direction. In year 2000, 80% of registered voters voted to keep the drawbridge. NCDOT should build a low rise drawbridge parallel north of the existing bridge which will open by appointment only.

Response: The operation and maintenance of a low-rise drawbridge poses a problem for the vehicular and boating traffic in Beaufort. A taller bridge will allow for more free flow of boating traffic, while a fixed span bridge allows for more free flow of vehicular traffic.

Comment: The alternatives 1A and 1E do the least harm to the Maritime Museum Expansion property. NCDOT should provide a bike lane through the entire project.

Response: While alternative 1A and 1E may do less harm to the Maritime Museum Expansion Property, there are other resources and associated impacts that must be considered as well. Alternative 2D was determined to be the least environmentally damaging practicable alternative. This segment of US 70 is listed in the Incidental Bicycle and Pedestrian Needs section of the 2006 – 2012 TIP, indicating bicycle and pedestrian accommodations should be considered for inclusion in the roadway improvement project. The proposed facility includes shared bicycle accommodations along US 70. AASHTO's standard 1.2-meter (4-foot) paved shoulders are proposed. The proposed Gallants Channel Bridge includes 1.2-meter (4-foot) offsets and 1.37-meter (54-inch) bicycle safe railings.

2. Written Comments:

Comment: A 65-foot fixed bridge will block larger/taller boats. The tall ships at the Pepsi America Sail event to be held in 2006 are expected to attract over 100,000 visitors. The high rise bridge will have noise and visual impacts to the northwest part of town and historic district and would devastate the village atmosphere. It would cause economic hardship to the boat and tourism industries. A 45-ft to 55-ft drawbridge should be considered which would open by appointment only. Reducing the amount of opening times for the bridge could reduce traffic congestion at the Grayden Paul Bridge. Another

way to reduce traffic is to bypass Beaufort to the north by connecting Havelock to the existing 70E near East Carteret High School.

Response: The operation and maintenance of a 45 ft to 55 ft drawbridge is not considered cost effective for this project. The construction cost of a drawbridge would add 20 million dollars to the project. Due to the additional cost and the vehicular delay associated with a drawbridge, the 65-foot high rise bridge was selected.

Comment: Two citizens expressed their support for alternative 2D with the following modifications: 1) Shift the landing of the east side of the bridge as far south as possible to minimize the impact on the NC Maritime Museum's project. 2) Consider an overpass at the intersection of Turner Street and NC 101 as well as a removable span at the top of the 65-ft bridge.

Response: During the design phase, NCDOT will minimize the impact of the selected alternative to the maritime museum expansion site. An overpass at Turner Street is not feasible due to design issues and the proximity to the airport flight paths.

Comment: Two citizens were opposed to the project for the following reasons: All alternatives go around their property. Business will be affected and the value of the property will go down. The Town of Beaufort will experience a negative economic impact. A 65-foot fixed span bridge will limit the ability to accommodate vessels with mast height of over 65 feet. Jarrett Bay, Bock Marine and the NC Maritime Museum expansion site would be severely hampered costing the town thousands of dollars in revenue.

Comment: One citizen acknowledged that the heavy traffic on Cedar Street, Live Oak, and NC 101 is affecting the quality of life in downtown Beaufort. He asked if the if the process of constructing the project could be expedited.

Comment: Mr. Wagoner stated that the board is in support of a northern route. The board believes that a new bridge is needed and would like to see the project move forward to eliminate delays and congestion while improving accessibility for emergency vehicles.

Comment: One citizen expressed his support for alternative 2D with a slight change. He recommended the alternative (2D) continue further along West Beaufort Road to just short of Stanton Road, thus avoiding a large drainage ditch along the southern end of the airport.

Response: NCDOT will continue to develop the selected alternative to avoid and/or minimize to the maximum extent possible impacts to properties and resources along the project corridor.

D. NEPA/404 Merger Process

The NEPA/404 merger process was implemented on this project to allow early and frequent coordination to take place with NCDOT, the Federal Highway Administration and Resource Agencies. Early coordination is essential considering the new location portion of the project and anticipated impacts. Early coordination allows the permitting and approving agencies to identify and resolve issues that may be problematic early in the planning process.

Review of Concurrence Points

Concurrence Point 3 –Least Environmentally Damaging Alternative (Approved February 17, 2005).

On February 17, 2005, a merger team meeting was held in Raleigh to select the alternative to be constructed. The project team signed a concurrence form in support of Alternative 2D as the Least Environmentally Damaging Practicable Alternative. Alternative 2D is the northern-most alternative for the project.

The interagency merger team selected alternative 2D based on a comparison of costs and impacts. The location of the proposed bridge over Gallants Channel for 2D has no adverse effect on the Beaufort Historic District. Alternative 2D does not displace businesses and residents in the Beaufort Historic District and impacts to Beaufort Middle School are avoided. Certain wetland sites are avoided and impacts to others are minimized to the maximum extent possible. The implementation of alternative 2D also provides a better intersection with the existing US 70. Other alternatives intersect US 70 in the vicinity of Beaufort Elementary School, Beaufort Middle School, and Beaufort Christian Academy and would lead to more conflicts with school traffic.

Concurrence Point 2A/4A –Bridging Decisions/Avoidance and Minimization (Approved November 17, 2005).

A NEPA/404 merger meeting was held August 14, 2005 to discuss bridge length issues and further avoidance and minimization of environmental impacts. The merger team agreed to replace the culvert at Turner Street with a bridge. It was decided that the length of the bridge would be determined as more detailed design information became available. On November 17, 2005, the merger team reconvened to obtain concurrence on Point 2A/4A, Bridging Decisions/Avoidance and Minimization. The merger team agreed on a slight shift of alternative 2D to minimize impacts to the human environment. The alignment shift reduced the number of residential relocations in the vicinity of wetland site O and an expanding subdivision. Other items the team reached agreement on were:

- 1) The length for the bridge over Gallants Channel will be 3,362 ft.

- 2) The vertical clearance of the bridge over Gallants Channel will be 65 ft.
- 3) A bridge will be constructed to replace the structure on Turner Street. The length of the Turner Street bridge will be 580 ft or longer.
- 4) Coordination between the NCDOT and the Carteret County Home will continue to take place to address indirect impacts to the historic property.

VII. REVISIONS TO THE ENVIRONMENTAL ASSESSMENT

A. Cost Estimates

Based on the selection of alternative 2D and design revisions to reduce wetland and relocation impacts, the current cost estimate is \$64,550,000, which includes \$21,250,000 for right of way acquisition, and \$43,300,000 for construction.

B. Bridge / Culvert Recommendation

The replacement of the metal pipes at Town Creek is now proposed as a new bridge 580-feet long and 64-feet in width. NCDOT has agreed to the removal of a portion of the causeway to aid the hydrology and ecological system for the area.

The existing Grayden Paul bridge over Gallants Channel will be replaced by a new bridge constructed to the north of the existing crossing. The new bridge will be a fixed span structure with a navigable clearance of 65 ft. and a length of 3362 ft.

C. Historic Properties

There are two properties listed on the national Register of Historic Properties in the vicinity of the project limits, the Carteret County Home and the Grayden Paul Bridge. The project has been designed to avoid the Carteret County Home, but will be in close proximity to it. The State Historic Preservation Office determined that the effect to these resources would be adverse. NCDOT, the State Historic Preservation Office, and the Federal Highway Administration have developed a memorandum of agreement addressing project effects to the Carteret County Home and the Grayden Paul Bridge (see Appendix D).

D. Sidewalks

The Town of Beaufort has verbally requested sidewalks along both sides of the project within the town limits. Sidewalks can be provided where curb and gutter is proposed for the project. Curb and gutter will be provided where the new location portion of the project intersects with the existing US 70 near Shell Landing Road. Upon receipt of a written request from the Town of Beaufort, a municipal agreement will be developed with the Town of Beaufort to finalize the cost sharing for the implementation of sidewalks in the municipality's jurisdiction. However, NCDOT does not offer cost sharing for construction of sidewalk outside of municipality town limits.

E. Federally-Protected Species

In accordance with the US Fish and Wildlife Service comments on the Environmental Assessment (see Appendix), the biological conclusion for the West Indian Manatee is revised to "May effect, not likely to adversely effect."

The precautionary measures for the West Indian Manatee listed in the Environmental Assessment have been revised by the US Fish and Wildlife Service. NCDOT will implement the new measures "Guidelines for Avoiding Impacts to the West Indian Manatee, Precautionary Measures for Construction Activities in North Carolina Waters (see Appendix F).

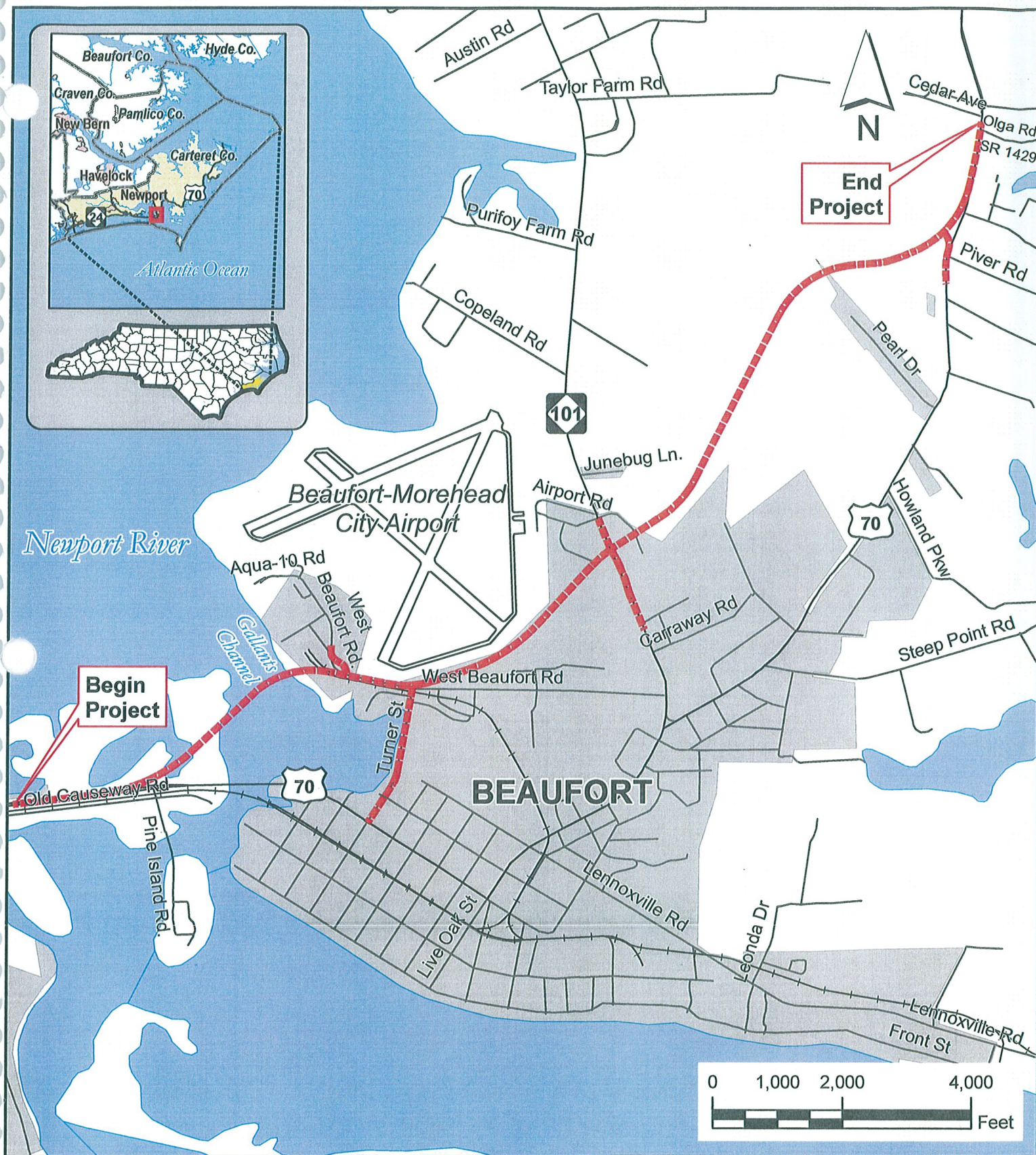
VIII. BASIS FOR FINDING OF NO SIGNIFICANT IMPACT

Based upon a study of the impacts of the proposed project as documented in the Environmental Assessment, and upon comments from federal, state, and local agencies, it is the finding of the NCDOT and the Federal Highway Administration (FHWA) that the project will not have a significant impact upon the quality of the human or natural environment. No significant impacts on natural, ecological, cultural or scenic resources are expected. In view of the above evaluation, it has been determined that a Finding of No Significant Impact is applicable for this project. Neither an Environmental Impact statement nor further analysis is required.

UJM/

Appendix A

Figures

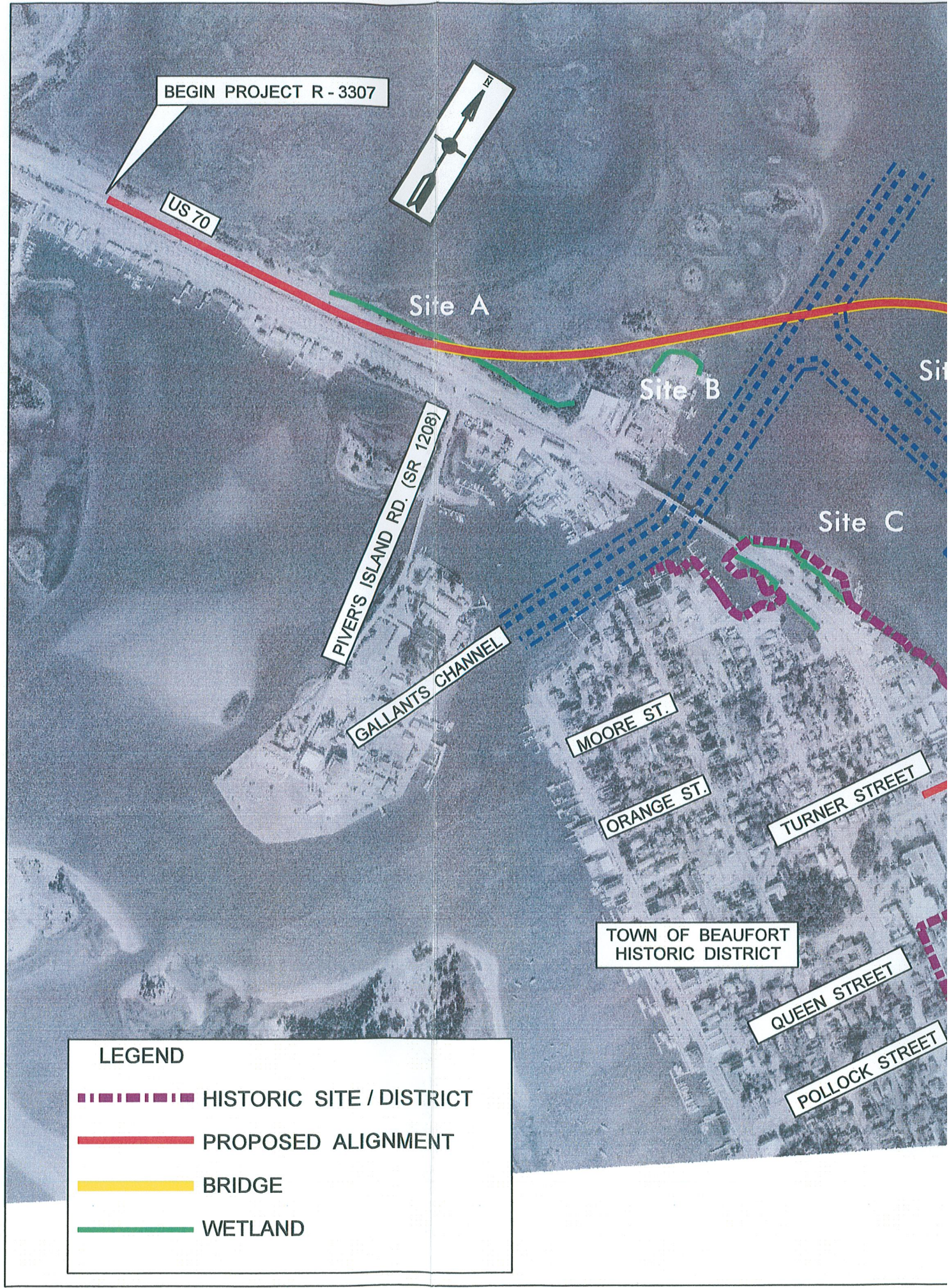


NORTH CAROLINA DEPARTMENT
OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROJECT DEVELOPMENT AND
ENVIRONMENTAL ANALYSIS BRANCH

VICINITY MAP
US 70 FROM RADIO ISLAND
TO NORTH OF SR 1429
BEAUFORT, CARTERET COUNTY
TIP PROJECT R-3307

County:	BEAUFORT
Div. 2	TIP# R-3307
WBS:	34528.1.1
Date:	JUNE 2006

Figure
1



BEGIN PROJECT R - 3307

US 70

Site A

Site B

Site C

PIVER'S ISLAND RD. (SR 1208)

GALLANTS CHANNEL

MOORE ST.

ORANGE ST.

TURNER STREET

TOWN OF BEAUFORT
HISTORIC DISTRICT

QUEEN STREET

POLLOCK STREET

LEGEND

- HISTORIC SITE / DISTRICT
- PROPOSED ALIGNMENT
- BRIDGE
- WETLAND



LEGEND

- HISTORIC SITE / DISTRICT
- PROPOSED ALIGNMENT
- BRIDGE
- WETLAND

MATCH LINE - FIGURE 2A

Appendix B

Correspondence



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

February 4, 2005

Dr. Gregory J. Thorpe, Ph.D.
Environmental Manager Director
Project Development and Environmental Analysis Branch
N.C. Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

SUBJ: EPA Review of the Federal Environmental Assessment for the US 70 Improvements from Four Lanes at Radio Island to SR 1429, Beaufort, in Carteret County; Federal Aid Project No. STPNHF-70(43), State Project No. 8.1162501, T.I.P. Project No.: R-3307

Dear Dr. Thorpe:

Pursuant to Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the referenced North Carolina Department of Transportation (NCDOT) Environmental Assessment for the US 70 Improvements from Four Lanes at Radio Island to SR 1429, Beaufort, in Carteret County. The EA addresses five (5) construction alternatives including 1A, 1E, 2A, 2D and 2E. US 70 is proposed to be extended to a divided, multilane facility. The project will also replace the existing drawbridge over Gallants Channel with a high-rise or mid-rise bridge. The length of the new location project is approximately 3.7 miles.

EPA offers the following comments on the EA.

EPA has been previously engaged in this Merger project. According to EPA's concurrence point tracking database, the Merger team agreed to purpose and need in September of 1998 and alternatives to be carried forward in September of 1999, June of 2000 and March of 2001. EPA has no environmental concerns regarding the project's overall purpose and need. However, it has been several years since alternatives were agreed to by team members and EPA would recommend that NCDOT and FHWA consider expediting the schedule for the next concurrence meeting in order to potentially avoid project consistency problems.

► **ALTERNATIVES**

* Alternatives: Alternatives 1A and 1E cross Gallants Channel at a more southerly route with a high-rise bridge (65 feet of navigational clearance). Alternatives 1A and 1E split approximately 1/2 mile east of the proposed bridge. Alternative 1E takes a more northerly course and then curls

southward around the proposed school expansion site (Carteret County Middle School) until it connects back to the termini at Shell Landing Road (SR 1301). Alternative 1A crosses Alternative 1E at about the same impact location as Alternative 1E has with the proposed school expansion point. However, Alternative 1A takes a more southerly route through the school property and appears to impact a greater amount of the actual property. Alternative 1A then takes a more northerly course to the termini at Shell Landing Road. Alternative 2A is very similar to Alternative 1A except that the bridge replacement location is further north than Alternatives 1A and 1E and begins at West Beaufort Road near(at) the N.C. Maritime Museum property. Alternative 2D is the overall northern most alternative and follows the same route as Alternative 2A except by the school expansion site. This alternative (2D) appears to miss the school property. Alternative 2E is the same alignment as Alternative 2D from Radio Island to Stanton Road and then follows the same alignment as Alternative 1E.

Table 5 of the EA provides a table of [partial] comparison for the 5 build alternatives. Several environmental factors (e.g. Terrestrial forests) are not included in the table. Relocations including residential and business for the alternatives range between 30 (Alternative 2A) and 97 (Alternative 1E). All five alternatives have an adverse effect on the Carteret County Home, a National Register property. Alternatives 1A and 1E have an adverse effect on the Beaufort Historic District.

► AFFECTED ENVIRONMENT

* Wetlands and Streams: Table 5 of the EA indicates that Alternatives 1A and 1E impact 0.5 acres of salt marsh. Alternatives 2A, 2D and 2E impact 2.0 acres of salt marsh. Alternatives 1A and 1E differ substantially in the impact to freshwater wetlands: 10.0 acres versus 5.3 acres. Impacts to freshwater wetlands for Alternatives 2A, 2D and 2E are 10.9 acres, 7.7 acres and 3.4 acres, respectively. Alternatives 1E and 2E have the least total impacts to salt marsh and freshwater wetlands (5.8 acres and 5.4 acres). Specific impacts to Gallants Channel and Town Creek could not be identified in the EA.

The EA addresses avoidance, minimization and compensatory mitigation for wetland impacts on pages 62 and 63. Three potential mitigation sites including salt marsh restoration are identified in the Conceptual Mitigation Strategy and EPA would request that NCDOT actively pursue these opportunities as part of the NEPA/404 Merger process. NCDOT has identified several minimization activities, including decreasing the footprint of the proposed project through the reduction of median widths, right of way widths, fill slopes, and/or shoulder widths and consideration to bridging wetlands. Because a significant portion of the project involves construction of a new bridge crossing and the requirement for a raised structure, EPA would request that NCDOT also give strong consideration to reducing the median and shoulder widths as part of its minimization strategy. EPA acknowledges the environmental commitment ("Green sheet", page 1 of 1) for including 3:1 fill slopes in wetland areas.

The EA addresses improvements to Turner Street which is believed to be partially a gravel road through the marsh area adjacent to "Harbor of Refuge". EPA views the proposed roadway improvements as a possible opportunity for restoration/mitigation by re-establishing hydraulic

connectivity. EPA would request that NCDOT explore this opportunity further by considering bridging a part of the Turner Street section of improvements in the marsh area.

* Terrestrial Forests : Table 14 of the EA includes an estimate impact to terrestrial communities. Impacts to pine plantation/wet pine flatwoods range between 3.0 and 10.2 acres for the five alternatives. There is also estimated impact to salt shrub which is shown to be less than 0.1 acres for all five alternatives. These terrestrial forest impacts were based primarily on the entire right of way and not on actual potential construction limits and may be less than indicated in the EA.

* Prime Farmlands : Based upon soil types and current land uses, there appears to be no prime farmland within the project study area. EPA concurs with NCDOT findings for this resource. However, EPA is confused over the statement on page 34 of the EA stating that, "Farmland mitigation or avoidance appears not to be necessary". EPA is unfamiliar with any NCDOT policy or other regulatory requirement for actual farmland mitigation.

* Noise Receptors : Noise receptor impacts are shown in Table 5 of the EA and range between 27 and 52 for the five build alternatives. There is a generic discussion of noise barriers on pages 69 and 70 of the EA. NCDOT should have cited NCDOT's current Noise Policy regarding the cost effectiveness of noise barriers for potential benefitted receptors and describe in project specific detail why noise barriers are not recommended for the proposed project. It is also important to note that there might be a potential adverse noise effect to the N.C. Maritime Museum from noise impacts if Alternative 2A is selected (Page 81 of the EA regarding coordination 11/22/99 meeting with the N.C. Maritime Museum). This issue was not identified in the noise section of the EA.

* Hazardous Materials : Pages 71 to 73 of the EA describe 11 facilities which could present petroleum contamination problems within the project study area. EPA was unable to identify these facilities in relationship to the 5 build alternatives and the potential for any impacts to these facilities from a selected alternative. EPA would request that the location, the number of hazardous material facilities and a general description of risk (e.g. high, medium, low) from contamination be provided in future Merger documentation for each of the 5 build alternatives. If any substantial impacts are encountered from the 11 potential hazardous materials, underground storage tank (UST) sites during further geo-technical studies, EPA would request a copy of the specific geo-technical report for review.

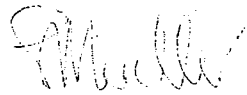
* Environmental Justice Communities : The EA identifies a low-income, mobile home park east of the proposed bridge. NCDOT estimates Alternatives 1A and 1E are anticipated to have substantial visual, noise, relocation, stability and cohesion impacts to this community. EPA would request that some of the potential impacts be quantified (e.g., Noise receptors and relocations) by NCDOT at the next Merger meeting. NCDOT has identified that Alternatives 2A, 2D and 2E will avoid this community.

• SUMMARY OF ENVIRONMENTAL CONSEQUENCES

EPA has general environmental concerns for potential impacts to wetlands and streams, noise receptors, an environmental justice community and historic properties. Furthermore, EPA is

requesting additional information on potential stream impacts and hazardous material sites. EPA proposes to stay involved with this project through the NEPA/404 Merger process and would ask that information requests be provided at the next scheduled meeting. At this time, EPA has not identified a preferred alternative from the 5 build alternatives. All of the impacts have substantial impacts to the human and natural environment. EPA is requesting further information on potential salt marsh mitigation site opportunities, stream impacts and other factors which could affect our recommendation and decision on the Least Environmentally Damaging Practicable Alternative (LEDPA). We appreciate the opportunity to comment on this EA. Should you have questions regarding these comments, please feel free to contact Christopher Militscher of my staff at 919-856-4206.

Sincerely,

A handwritten signature in dark ink, appearing to read "H. Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

cc: K. Jolly, USACE Wilmington District
J. Sullivan, FHWA, Raleigh



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

FILE COPY

December 21, 2004

Gregory J. Thorpe, Ph.D.
Project Development and Environmental Analysis
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

This letter is in response to your November 24, 2004 letter which requested comments from the U.S. Fish and Wildlife Service (Service) on the Environmental Assessment (EA) for the proposed US 70 improvements from the existing four lanes at Radio Island to north of Beaufort near Olga Road (SR 1429), Carteret County, North Carolina (TIP No. R-3307). These comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (16 U.S.C. 661-667d) and section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

According to the EA, the North Carolina Department of Transportation (NCDOT) proposes to improve a 3.7 mile long section of US 70 to a multi-lane facility, almost entirely on new location. The project would replace the existing drawbridge over Gallants Channel with a new high-rise or mid-rise bridge on new location. There are currently five build alternatives being considered.

The Service participates on the combined 404/NEPA Merger Team for this project. At the last Merger Team meeting on January 15, 2004, the Service provided input which helped lead to narrowing the range of alternatives down to the current five being considered. At this time, the Service does not have a preferred alternative. Each of the current five alternatives has its own benefits and difficulties. We will defer specific comment on the alternatives until the next Merger Team meeting, which will likely lead to selection of the Least Environmentally Damaging Practicable Alternative.

There are fourteen federally listed species for Carteret County. Table 15 on page 41 of the EA incorrectly lists the peregrine falcon (*Falco peregrinus anatum*) as a federally listed species. This species was delisted in 1999. NCDOT has determined that the proposed project will have no effect on the shortnose sturgeon (*Acipenser brevirostrum*), loggerhead sea turtle (*Caretta caretta*), piping plover (*Charadrius melodus*), leatherback sea turtle (*Dermochelys coriacea*), eastern cougar (*Puma concolor cougar*), red-cockaded woodpecker (*Picoides borealis*), seabeach amaranth (*Amaranthus pumilus*), rough-leaved loosestrife (*Lysimachia asperulaefolia*), hawksbill sea turtle (*Eretmochelys imbricata*), Kemp's ridley sea turtle (*Lepidochelys kempii*), roseate tern (*Sterna dougalli*), West Indian manatee (*Trichechus manatus*) and green sea turtle (*Chelonia mydas*). The American alligator (*Alligator mississippiensis*) is listed as threatened due to similarity of appearance and does not require section 7 consultation. The Service concurs with NCDOT's "No Effect" determinations for all of the species except for the shortnose sturgeon and the West Indian manatee. The shortnose sturgeon is under the purview of the National Marine Fisheries Service.

The Service cannot concur that the project will have no effect on the West Indian manatee due to the presence of suitable habitat and known occurrences of the species near the project site as recent as 1999. However, the Service would likely concur with a determination of "may affect, not likely to adversely affect" if NCDOT follows certain measures. Pages 48-49 and the "greensheet" state that NCDOT will implement guidelines developed by the Service to minimize the potential for impacts to manatees. Please note that these guidelines have been recently revised. The revised guidelines are entitled "Guidelines For Avoiding Impacts To The West Indian Manatee: Precautionary Measures for Construction Activities in North Carolina Waters". This document may be found at http://nc-es.fws.gov/mammal/manatee_guidelines.pdf.

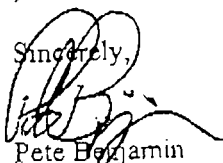
Pages 42-50 of the EA repeatedly state that the North Carolina Natural Heritage Program (NCNHP) records were reviewed for sightings of each of the listed species on December 16, 1999. For a document that was approved in October of 2004, these reviews are now almost five years old. Due to the dynamic nature of the NCNHP database, the Service strongly recommends that more current reviews be made for future projects.

Mr. Gary Jordan, of my staff, field inspected portions of the project site on December 15, 2004. During the field inspection it became obvious that the aerial photographs included in the EA are outdated. A substantial amount of development and other disturbance has occurred within the project area since the undated photographs were taken. For example, much of Wetland Site O and adjacent forest land has been clear cut and cleared. Also, a new subdivision has been built on the west and northwest side of Pearl Drive. This subdivision may have implications for Alternatives 1A, 2A and 2D. As a general recommendation, the Service requests that the most up-to-date aerial photography be used in EA documents, and that all aerial photographs list the date taken.

Table 20 lists Wetland Site G as being a salt marsh wetland. During the site inspection, it appeared that this wetland is a mosaic of salt marsh and shrub/scrub wetland. Consequently, the Service questions the wetland impact data for this wetland site.

The Service appreciates the opportunity to review this project. If you have any questions regarding our response, please contact Mr. Gary Jordan at (919) 856-4520, ext. 32.

Sincerely,



Pete Benjamin
Ecological Services Supervisor

cc: Chris Militscher, USEPA, Raleigh, NC
Travis Wilson, NCWRC, Creedmoor, NC
Nicole Thomson, NCDWQ, Raleigh, NC
Dave Timpy, USACE, Wilmington, NC

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
United States Coast Guard
Fifth Coast Guard District

431 Crawford Street
Portsmouth, Va. 23704-5004
Staff Symbol: obr
Phone: (757) 398-6227
Fax: (757) 398-6334
Email: aallen@lantd5.uscg.mil

16591

28 JAN 05

Mr. Gregory J. Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, NC 27699-1548

Dear Dr. Thorpe:

This is in response to your letter dated November 24, 2004, concerning the Environmental Assessment for the proposed US 70 bridge replacement project over Gallants Channel in Beaufort, NC. The Coast Guard will issue a Preliminary Public Notice to solicit comments regarding the 45-foot and 65-foot vertical clearance alternatives.

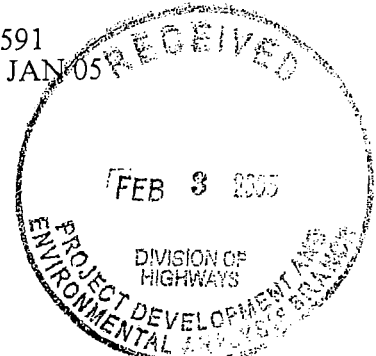
Prior to issuing a Preliminary Public Notice, we will require a basic set of elevation and side view construction plans clearly identifying the proposed vertical and horizontal clearances for each alternative, on 8.5" x 11" paper, suitable for copying.

We look forward to working with you throughout the approval process. Please contact Anton Allen at the above number for further assistance. Thank you for your advanced notification of this matter.

Sincerely,

A handwritten signature in cursive script that reads "Waverly W. Gregory, Jr.".

WAVERLY W. GREGORY, JR.
Chief, Bridge Administration Branch
By direction of the Commander
Fifth Coast Guard District



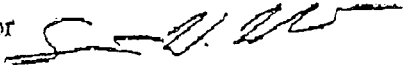


North Carolina Wildlife Resources Commission

Richard B. Hamilton, Executive Director

MEMORANDUM

TO: Melba McGee
Office of Legislative and Intergovernmental Affairs, DENR

FROM: Travis Wilson, Highway Project Coordinator 
Habitat Conservation Program

DATE: December 23, 2004

SUBJECT: North Carolina Department of Transportation (NCDOT) Environmental Assessment (EA) for the proposed improvements to US 70 in Beaufort, Carteret County, North Carolina. TIP No. R-3307, SCH Project No. 05-0157

Staff biologists with the N. C. Wildlife Resources Commission have reviewed the subject EA and are familiar with habitat values in the project area. The purpose of this review was to assess project impacts to fish and wildlife resources. Our comments are provided in accordance with certain provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 651-667d).

NCDOT proposes to improve US 70 in Beaufort to a multilane facility including replacing the existing drawbridge over Gallants Channel with a high-rise bridge and extend US 70 as a multilane facility from four lanes at Radio Island to near Olga Road (SR 1429). The total project length is approximately 3.7 miles. Estimated wetland impacts range from 5.4 acres to 12.9 acres

The EA should contain a record of stream impacts for each alternative. Table five of the document does not contain this information, nor is it addressed in section VI.D of the document. If no stream impacts exist for this project it should be stated.

12/23/2004 15:12 9195289839

Memo

2

December 23, 2004

At this time, we concur with the EA for this project. We anticipate further involvement and coordination through the merger process. Thank you for the opportunity to comment on this EA. If we can be of any further assistance please call me at (919) 528-9886.

cc: Gary Jordan, U.S. Fish and Wildlife Service, Raleigh
John Hennessy, DWQ, Raleigh
Bill Biddlecomb, U.S. Army Corps of Engineers, Washington



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E., Director
Division of Water Quality
Coleen H. Sullins, Deputy Director
Division of Water Quality

MEMORANDUM

DIVISION OF WATER QUALITY

TO: Melba McGee, Environmental Coordinator

FROM: Joanne Steenhuis, Environmental Specialist III *JHS*

THROUGH: Rick Shiver, Water Quality Regional Supervisor *RMS*

DATE: December 28, 2004

SUBJECT: Environmental Assessment

PROJECT: US 70 From Four Lanes at Radio Island to North Beaufort Near Olga Road (SR 1429)
Federal-Aid Project No. STPNHF-70(43)
State Project No. 8.1163501
TIP No. R-3307
WBS No. 34528.1.1
Beaufort, Carteret County
Project No. 05-0157

COUNTY: Carteret

The Wilmington Regional Office has reviewed the Environmental Assessment document concerning the proposed improvements of US 70 from Gallants Channel to near Olga Road (SR 1429) in Carteret County. This Office supports the Alternative 2E route with the minimal 401 wetland impacts, but the potential of additional (cumulative) impacts to wetlands along the new alignment (future development) was not addressed within the assessment. In addition, the presence or absence of Submerged Aquatic Vegetation (SAVs) within the project corridor was also not addressed.

The project will require the following permits from the Division of Water Quality.

401 Water Quality Certification – This permit will be required for the impacts to wetlands necessary to complete this proposed project on the new alignment/location. The Division of Water Quality would also be concerned about the potential of exceeding the Water Quality Standards during the building of the proposed bridges.

Mitigation – Mitigation will be required for the proposed wetland impacts.

Page Two
EA Project NO. 05-0157
December 28, 2004

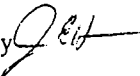
NPDES General Stormwater Permit No. NCG10000 – All sites that disturb one acre or more of land are subject to the conditions of this permit. The permit is distributed with and referenced in the Sedimentation and Erosion Control Approval Letter. If the project is acting under a previously approved SEC Plan, any new disturbance at the site is subject to the conditions of the most recent version (October 1, 2001) of this general stormwater permit. Please note the monitoring and reporting requirements.



February 9, 2005

MEMORANDUM

To: Melba McGee

Through: John Hennessy 

From: Nicole Thomson

Subject: Comments on the Environmental Assessment for Improvements to US 70 from four lanes at Radio Island to North of Beaufort near Olga Road (SR 1429) Carteret County, Federal Aid Project STPNHF-70(43), State Project No. 8.1162501, TIP R-3307, DENR Project Number 05-0157.

This office has reviewed the referenced document. The Division of Water Quality (DWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the alternatives, as presented in the EA, will result in impacts to jurisdictional wetlands and streams. The project will have impacts to wetlands, streams, and other surface waters associated with the White Oak River Basin.

The DWQ offers the following comments based on review of the aforementioned document:

- A) After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the NCDOT is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. Based on the impacts described in the document, wetland mitigation will be required for this project in accordance with Environmental Management Commission's Wetland Rules {15A NCAC 2H.0506 (h)(2)}.
- B) In accordance with the Environmental Management Commission's Rules {15A NCAC 2H.0506(b)(6)}, mitigation will be required for impacts of greater than 150 linear feet to any single perennial stream. In the event that mitigation is required, the mitigation plan should be designed to replace appropriate lost functions and values. In accordance with the Environmental Management Commission's Rules {15A NCAC 2H.0506 (h)(3)}, the NC Ecosystem Enhancement Program may be available for use as stream mitigation.
- C) Where streams must be crossed, the DWQ prefers bridges be used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, DOT should not install the bridge bents in the creek, to the maximum extent practicable.
- D) NC DOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.
- E) Sediment and erosion control measures should not be placed in wetlands.



- F) Borrow/waste areas should avoid wetlands to the maximum extent practicable. Impacts to wetlands in borrow/waste areas could precipitate compensatory mitigation.
- G) Future documentation should continue to include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.
- H) The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater should not be permitted to discharge directly into streams and surface waters.
- I) An analysis of cumulative and secondary impacts anticipated as a result of this project is required. The type and detail of analysis should conform to the NC Division of Water Quality Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.
- J) There should be a discussion on mitigation plans for unavoidable impacts. If mitigation is required, it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. While the NCDWQ realizes this may not always be practical, it should be noted that for projects requiring mitigation, appropriate mitigation plans will be required in conjunction with the issuance of a 401 Water Quality Certification.
- K) Based on the information presented in the document, the magnitude of impacts to wetlands and streams will require an Individual Permit application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the NCDOT and written concurrence from the NCDWQ. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.

The NCDWQ appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact John Hennessy at (919) 715-3415.

cc: US Army Corps of Engineers, Washington Field Office
Gary Jordan, USFWS
Travis Wilson, NCWRC
NCDWQ Washington Regional Office
Central Files
File Copy

DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

Project Number
05-0157

County
Carteret

Inter-Agency Project Review Response

USDOT/NCDOT

US 70 Improvements from
four lanes at Radio Island to
North of Beaufort Near Olga
Road (SR 1429)

Project Name _____

Type of Project _____

- ☐ The applicant should be advised that plans and specifications for all water system improvements must be approved by the Division of Environmental Health prior to the award of a contract or the initiation of construction (as required by 15A NCAC 18C .0300et. seq.). For information, contact the Public Water Supply Section, (919) 733-2321.
- ☐ This project will be classified as a non-community public water supply and must comply with state and federal drinking water monitoring requirements. For more information the applicant should contact the Public Water Supply Section, (919) 733-2321.
- ☐ If this project is constructed as proposed, we will recommend closure of _____ feet of adjacent waters to the harvest of shellfish. For information regarding the shellfish sanitation program, the applicant should contact the Shellfish Sanitation Section at (252) 726-6827.
- ☐ The soil disposal area(s) proposed for this project may produce a mosquito breeding problem. For information concerning appropriate mosquito control measures, the applicant should contact the Public Health Pest Management Section at (919) 733-6407.
- ☐ The applicant should be advised that prior to the removal or demolition of dilapidated structures, a extensive rodent control program may be necessary in order to prevent the migration of the rodents to adjacent areas. For information concerning rodent control, contact the local health department or the Public Health Pest Management Section at (919) 733-6407.
- ☐ The applicant should be advised to contact the local health department regarding their requirements for septic tank installations (as required under 15A NCAC 18A. 1900 et. seq.). For information concerning septic tank and other on-site waste disposal methods, contact the On-Site Wastewater Section at (919) 733-2895.
- ☐ The applicant should be advised to contact the local health department regarding the sanitary facilities required for this project.
- ☒ If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Environmental Health, Public Water Supply Section, Technical Services Branch, 1634 Mail Service Center, Raleigh, North Carolina 27699-1634, (919) 733-2321.
- ☒ For Regional and Central Office comments, see the reverse side of this form.

Jim McRight

PWS

12-16-04

Reviewer

Section/Branch

Date



State of North Carolina
Department of Environment and Natural Resources

Reviewing Office: WDE

Project Number: 050157 Due Date: 12/31/04

INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

After review of this project it has been determined that the DENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of this form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (Statutory Time Limit)
<input type="checkbox"/> Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/> NPDES-permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection preapplication conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90 - 120 days (N/A)
<input type="checkbox"/> Water Use Permit	Preapplication technical conference usually necessary	30 days (N/A)
<input type="checkbox"/> Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
<input type="checkbox"/> Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Preapplication conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/> Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC 2Q.0100, 2Q.0300, 2H.0600	N/A	60 days
<input checked="" type="checkbox"/> Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input type="checkbox"/> Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 2D.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-733-0820.		
<input type="checkbox"/> Complex Source Permit required under 15 A NCAC 2D.0800		
<input type="checkbox"/> The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (Land Quality Section) at least 30 days before beginning activity. A fee of \$50 for the first acre or any part of an acre.		20 days (30 days)
<input checked="" type="checkbox"/> The Sedimentation Pollution Control Act of 1973 must be addressed with respect to the referenced Local Ordinance. <u>NCDOT</u>		30 days
<input type="checkbox"/> Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable stormwater conveyances and outlets.		
<input type="checkbox"/> Mining Permit	On-site inspection usual. Surety bond filed with DENR. Bond amount varies with type mine and number of acres of affected land. Any are mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/> North Carolina Burning permit	On-site inspection by N.C. Division of Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/> Special Ground Clearance Burning Permit-22 counties in coastal N.C. with organic soils.	On-site inspection by N.C. Division of Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
	N/A	90 - 120 days (N/A)

PERMITS		SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (Statutory Time Limit)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to DENR approved plans. May also require permit under mosquito control program, and a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with DENR running to State of N.C. conditional that any well opened by drill operator shall, upon abandonment, be plugged according to DENR rules and regulations.	10 days (N/A)
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with DENR at least 10 days prior to issue of permit. Application by letter. No standard application form.	10 days (N/A)
<input type="checkbox"/>	State Lakes Construction Permit	Application fees based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property.	15 - 20 days (N/A)
<input checked="" type="checkbox"/>	401 Water Quality Certification	N/A	55 days (130 days)
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 fee must accompany application	60 days (130 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$50.00 fee must accompany application	22 days (25 days)
<input type="checkbox"/>	Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, N.C. 27611		
<input checked="" type="checkbox"/>	Abandonment of any wells. If required must be in accordance with Title 15A, Subchapter 2C.0100.		
<input checked="" type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.		
<input type="checkbox"/>	Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.		
*	Other comments (attach additional pages as necessary, being certain to cite comment authority)		

REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

☐ Asheville Regional Office
59 Woodfin Place
Asheville, N.C. 28801
(828) 251-6208

☐ Mooresville Regional Office
919 North Main Street
Mooresville, N.C. 28115
(704) 663-1699

☒ Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, N.C. 28405
(910) 395-3900

☐ Fayetteville Regional Office
225 Green Street, Suite 714
Fayetteville, N.C. 28301
(910) 486-1541

☐ Raleigh Regional Office
3800 Barrett Drive, P.O. Box 27687
Raleigh, N.C. 27611
(919) 571-4700

☐ Winston-Salem Regional Office
585 Woughtown Street
Winston-Salem, N.C. 27107
(336) 777-4600

☐ Washington Regional Office
943 Washington Square Mall
Washington, N.C. 27889



North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor
William G. Ross Jr., Secretary

Division of Marine Fisheries

Preston P. Pate Jr., Director

Memo

To: Gregory J. Thorpe, Ph.D., Director
Project Development and Environmental Analysis Branch

From: Patricia L. Murphey *PLM*
Marine Biologist Supervisor

Thru: Mike Marshall *MDM*
Central District Manager

Date: 1/13/2005

Re: Federal Environmental Assessment for US 70 Improvements, From Four Lanes at Radio Island to North of Beaufort Near Olga Road (SR 1429), Beaufort, Carteret County, Federal-Aid Project No. STPNHF-70(43), WBS No. 34528.1.1, State Project No. 8.1162501, TIP No. R-3307

The NC Division of Marine Fisheries (NCDMF) has reviewed the Environmental Assessment (EA) for US 70 improvements and would like to comment that there appears to be no significant impact to fisheries habitat (salt marsh) with any of the alternatives. However less salt marsh (0.49 acres) is impacted by the southerly route (Alternative 1A, 1E) compared to 1.96 acres impacted with the northerly route (Alternatives 2A, 2D, 2E). Possible mitigation sites are addressed in the EA for loss of salt marsh. However, NCDMF is concerned about accessibility to fishing waters by commercial and recreational fishermen who dock at Homer Smiths Seafood and Discovery Dive Shop Marina. The southerly route also crosses an area of shellfish habitat which is closed shellfishing due to high bacteriological counts but is opened to mechanical clam harvest for relay purposes in the spring. The NCDMF would like to see how water quality impacts such as increased runoff from the bridge and roadway would be minimized better addressed in the EA.

One
North Carolina
Naturally

3441 Arendell Street, P.O. Box 769, Morehead City, North Carolina 28557
Phone: 252 726-7021 \ FAX: 252 726-6062 \ Internet: www.ncdmf.net

An Equal Opportunity / Affirmative Action Employer - 50 % Recycled \ 10% post Consumer Paper



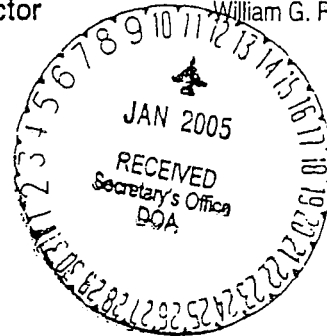
North Carolina Department of Environment and Natural Resources
Division of Coastal Management

Michael F. Easley, Governor
Secretary

Charles S. Jones, Director

January 5, 2004

William G. Ross Jr.,



Ms. Melba McGee, Environmental Coordinator
Office of Legislative & Intergovernmental Affairs
N.C. Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601

SUBJECT: SCH File # 05-E-4220-0157, Environmental Assessment. Improve US 70 in the Beaufort Area to a Multilane; Replace Existing Drawbridge Over Gallants Channel with High-Mid-Rise Bridge and Improve US 70 to Multilane at Radio Island to Near Olga Road (SR1429). Federal Aid Project STPNHF-70 (43), State Project No. 8.1162501, TIP No. R-3307.

Dear Ms. McGee:

The N.C. Division of Coastal Management (DCM) appreciates the opportunity to comment on the Environmental Assessment (EA) for the above referenced project. DCM received a copy of the EA for review through the State Clearinghouse on 12/9/04.

The NC Department of Transportation (NCDOT) and the Federal Highway Administration (FHWA) propose to improve US 70 in the Beaufort area to a multilane facility from Radio Island to near Olga Road (SR1429). The project proposes to replace the existing drawbridge over Gallants Channel with a high-rise or mid-rise bridge. The total length of the proposed project is approximately 3.7 miles. Right of way acquisition is scheduled in federal fiscal year (FFY) 2008, with construction to begin beyond 2010.

The NEPA/404 Merger Team met on March 14, 2001 and agreed on Concurrence Point 2 (Alternatives Carried Forward). At that meeting, the merger team agreed to carry 9 alternatives forward for consideration in the Environmental Assessment. On January 15, 2004 the merger team reevaluated and eliminated some of the alternatives from further consideration. Five alternatives are currently being considered for the proposed project. There is no NCDOT-preferred alternative and the merger team has not reached Concurrence Point 3 (Least Environmentally Damaging Practicable Alternative - LEDPA).

A formal DCM review of the project to determine consistency with the state's Coastal Management Program will not occur until a Coastal Area Management Act (CAMA) major permit application is received. At that time, the CAMA major permit application will be circulated to the network of state agencies that comprise North Carolina's Coastal Management Program. The statutes, rules and policies of each of these agencies must be satisfied in order for the project to be determined to be consistent with the Coastal Area Management Act and for a CAMA permit to be issued. The consideration and incorporation by NCDOT of the comments

contained within this letter and within future correspondence into the project planning and design should help to expedite the CAMA major permit application review process.

During the CAMA major permit application review process, DCM may have additional comments on the project's environmental impacts, and may place conditions on any CAMA permit (if issued) to minimize environmental impacts. The information provided in this letter shall not preclude DCM from requesting additional information throughout the CAMA major permit application review process, and following normal permitting procedures.

The following is a brief summary of DCM's comments on the Environmental Assessment.

1. Page i. Summary - Alternatives Considered

The Turner Street Bridge proposed over Town Creek was agreed to by the NEPA/404 Merger Team and relates to all of the alternatives. The bridge will improve hydraulic connectivity between Gallants Channel and the coastal marsh and will replace the existing culvert and portions of the Turner Street causeway. This bridge is described as a three-lane, 13.6-meter by 110-meter (45-foot by 360-foot) bridge on page 20, but not listed, and should be listed in the list of build alternatives that relate to all alternatives in the Summary, page i.

2. Page ii. Summary - Alternatives Considered

Alternative 2A is the same as Alternative 2B from Radio Island to east of NC 101. A justification for eliminating Alternative 2B was the crossing of the southern corner of the NC Maritime Museum property, as described on page 12 under, Alternatives Eliminated from Further Consideration. There is no mention of the Maritime Museum property under the description of Alternative 2A on page ii. The museum property could potentially be considered a publicly owned park or recreation area subject to Section 4(f) of the USDOT Act of 1966. A reference to the crossing of the southern corner of the museum property should be included in the description of Alternative 2A.

3. Page iii. Summary of Environmental Impacts

"The proposed improvements will improve traffic movement, reduce accidents, reduce delays, and increase accessibility within this area of the County. These improvements will benefit the region by increasing convenience and ease of travel for US 70 between Morehead City and eastern Carteret County." Justification of the project does not belong in a summary of environmental impacts. Also, alternates 1E and 2E will likely not reduce accidents or delays and likely hinder traffic movement at the eastern end of the project. These two sentences are misleading and should be removed.

4. Page iii. Summary - Recommended Alternative. and page 18 - Recommendation

"No alternative is recommended at this time. All five remaining "construction" alternatives will be shown to the general public at the public hearing. A decision will be made after the hearing". The LEDPA, or least environmentally damaging practicable alternative, will be determined at a meeting of the NEPA/404 merger team, to be held after the public hearing.

5. Project Commitments (a.k.a. Green Sheet)

"The project will include 3:1 fill slopes in wetland areas to eliminate the need for guardrail." DCM will only agree with the use of 3:1 side slopes in wetland areas, provided that NCDOT can supply adequate documentation to demonstrate that the maintenance and construction of 2:1 side slopes is not feasible. Documentation may include a description of the type of fill material to be used, and the stability of the ground surface where the fill material will be placed. Documentation may also include a description of NCDOT's experience constructing and maintaining 2:1 side slopes under similar circumstances.

"NCDOT will take precautions to limit debris from dropping into Waters of the U.S." DCM will require that debris resulting from demolition of the existing bridge not enter wetlands or waters of the United States, even temporarily. References to demolition debris entering the water can also be found on pages 40 and 59 of the EA. The NCDOT document "Best Management Practices for Bridge Demolition and Removal" (final 9/20/99) was developed in coordination with the USACE, the NC Wildlife Resources Commission, the National Marine Fisheries Service, and others, with the goal of establishing a consistent, environmentally sound approach to the demolition and removal of bridges. Adhering to this document will be a condition of the CAMA major permit for this project.

A portion of the project is located in a High Quality Water (HQW) Zone as designated by the NC Division of Water Quality. The Sedimentation Control Commission has increased standards for projects in HQW zones. The stricter NC Division of Land Quality rules, 15A NCAC 04B .0124, Design Standards for Sensitive Watersheds, apply. Reference was made to a commitment to implement these guidelines on pages 54 and 56; however, there was no reference to the guidelines in the "Green Sheet". These guidelines should be referenced as a project commitment.

Land disturbing activities must be in compliance with the Sedimentation and Pollution Control Act (SPCA) of 1973, in accordance with the February 25, 1991 delegation agreement with the NC Sedimentation Control Commission and the NC Department of Environment and Natural Resources. Reference was made to a commitment to implement NCDOT's Best Management Practices for the Protection of Surface Waters on pages 56; however, there was no reference to the guidelines in the "Green Sheet". These guidelines should be referenced as a project commitment.

The Stream Crossing Guidelines for Anadromous Fish Passage provides guidance to the NCDOT to ensure that replacement of existing stream crossing structures will not impede the movement of anadromous fish. If determined to be necessary by the NC Division of Marine Fisheries or the NC Wildlife Resources Commission, these guidelines should be referenced as a project commitment.

6. Page 2 and Page 16 - Traffic Volumes and Capacity Analysis

The level of service (LOS) for the design year is provided in Table 6; however, the LOS for the "no build" alternative is not provided for sections 1,2, and 6. It is stated that the "no build" alternative LOS ranges from LOS D to LOS F. There is no explanation for the missing data in Table 6 on page 16. This data or an explanation for the missing data should be provided.

7. Page 7 - Speed Limits

Beaufort Elementary School moved next to the Beaufort Middle School on Carraway Drive and the speed limits referenced in this section are outdated. There should be a discussion of the traffic cops that are required every day that school is in session. This is important because Alternatives 1E and 2E bring the new US 70 into the existing US 70 route, with an intersection within a few hundred feet of the school entrances. This is also the area of the project with the most traffic accidents. The traffic conditions would be exacerbated with the merging of higher speed traffic into the existing school zone.

8. Page 7 - Utilities

NCDOT should ensure that the environmental impacts due to any utility work for the entire project is provided to the NEPA/404 Merger Team for discussion at Concurrence Point No. 4 (avoidance and minimization). The environmental impacts due to any utility work for the entire project should also be included in the final permit drawings and permit application forms that are submitted with the permit applications for this project.

9. Page 8 - School Buses

The school buses that serve the Tiller School and Beaufort Christian Academy should also be enumerated in this section.

10. Page 11 - Table 5. Comparison of Alternatives

Freshwater wetlands listed in Table 5 and elsewhere in the document should be subdivided into more detailed categories where the delineations list wetlands. Converted wetlands, no longer functioning as natural wetlands or affected by existing ditches should also be listed. Many of these areas are ditched and cleared. Farm fields, houses and mobile homes with septic systems, construction yards, and other land uses occupy these areas.

Outdated delineations make some alternatives appear to have more wetlands impacts than would actually occur and may not accurately indicate the wetland impacts of each alternative. Field verification of wetland delineations need to be made with representatives of USACE, DWQ, and DCM to ensure accurate identification and quantification of jurisdictional wetlands.

It should be noted that all Salt Marsh will be bridged and all impacts to coastal wetlands will only be the result of shading.

11. Page 33 - Local/Regional Land Use and/or Development Plans

The 1996 Carteret County and Town of Beaufort Land Use Plans and the Town of Beaufort Strategic Approach to Growth (1999), an extension of the Town of Beaufort 1996 Land Use Plan, should be reviewed and a discussion of the relevant CAMA land use plan policies should be included in this section.

The Town of Beaufort received a Fiscal Year 1996/1997 CAMA Technical Assistance Grant of \$29,346 to undertake a transportation corridor study and impact analysis for relocation of

the Gallants Channel Bridge and the US 70 Corridor. This study is a comprehensive analysis of the social, economic, land use, and environmental impacts resulting from the relocation of the Gallants Channel Bridge, US 70 corridor, and NC 101. There should be a thorough review of this report, a comparison made with the data in the Environmental Assessment, and a discussion of the relevant differences.

12. Page 51 - Table 16. Federal Species of Concern for Carteret County

The Eastern Painted Bunting is listed as a significantly rare species having last been observed in the county more than 50 years ago. A notation in the EA indicates that further review of the NCNHP database of rare species shows 5 occurrences within the project vicinity. It should be noted that a DCM representative has observed 2 nesting pairs and at least 3 juvenile males in the project area.

13. Page 54 - Best Usage Classification and Page 56 - Summary of Anticipated Impacts

A portion of the project is located in a High Quality Water (HQW) Zone as designated by the NC Division of Water Quality. The Sedimentation Control Commission has increased standards for projects in HQW zones. The stricter NC Division of Land Quality rules, 15A NCAC 04B .0124, Design Standards for Sensitive Watersheds, apply. Reference was made to a commitment to implement these guidelines on pages 54 and 56; however, there was no reference to the guidelines in the "Green Sheet". These guidelines should be referenced as a project commitment.

14. Page 56 - Summary of Anticipated Impacts

Land disturbing activities must be in compliance with the Sedimentation and Pollution Control Act (SPCA) of 1973, in accordance with the February 25, 1991 delegation agreement with the NC Sedimentation Control Commission. Reference was made to a commitment to implement NCDOT's Best Management Practices for the Protection of Surface Waters on pages 56; however, there was no reference to the guidelines in the "Green Sheet". These guidelines should be referenced as a project commitment.

15. Page 56 - Characteristics of Wetlands and Surface Waters

This section defines the criteria for wetland classification as specified in the 1987 "Corps of Engineers Wetlands Delineation Manual". This section should also include the criteria for classification of coastal wetlands as defined in the CAMA regulations, 15A NCAC 07H .0205, Coastal Wetlands. An evaluation of coastal wetlands as defined by these rules is required for project permitting by the NC Division of Coastal Management.

16. Page 59 - Bridge Demolition and Removal

The NCDOT document "Best Management Practices for Bridge Demolition and Removal" (final 9/20/99) was developed in coordination with the USACE, the NC Wildlife Resources Commission, the National Marine Fisheries Service, and others, with the goal of establishing a consistent, environmentally sound approach to the demolition and removal of bridges. Adhering to this document will be a condition of the CAMA major permit for this project.

As a condition of the CAMA permit for this project, debris resulting from demolition of the existing bridge will not enter wetlands or waters of the United States, even temporarily.

17. Appendix C - Correspondence Letters

The correspondence letters were generally assembled in the document haphazardly and many were incomplete which made them difficult to review. Appendix C should be reassembled and the missing portion of incomplete letters should be included to allow for adequate review.

18. General Comments

In accordance with the CAMA general use standards, development shall not impede navigation or create undue interference with access to, or use of, public trust areas or estuarine waters. In the absence of overriding public benefit, any use that significantly interferes with the public right of navigation or other public trust rights shall not be allowed. Projects that would directly or indirectly block or impair existing navigation channels are generally considered incompatible with the management policies of public trust areas. NCDOT is encouraged to design a bridge that allows for the traditional and established usage of the water body to be maintained. Included in these design considerations should be an analysis of the navigational needs of all upstream commercial facilities and dockage areas.

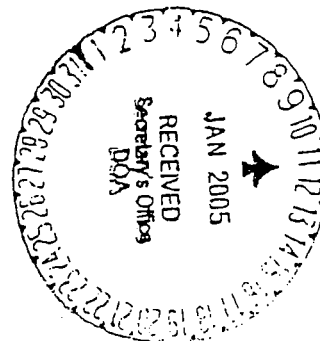
If you or NCDOT has any questions or concerns about these comments, please contact me at (919) 733-2293 x230 or via e-mail at steve.sollod@ncmail.net. Thank you for your consideration of the North Carolina Coastal Management Program.

Sincerely,



Steven D. Sollod
DCM Transportation Project Coordinator

cc: Mr. Bill Arrington, NC Division of Coastal Management
Mr. John Hennessy, NC Division of Water Quality
Mr. Dave Timpy, US Army Corps of Engineers
Mr. Ted Tyndall, NC Division of Coastal Management





North Carolina Department of Cultural Resources

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary

Office of Archives and History
Jeffrey J. Crow, Deputy Secretary

January 12, 2005

MEMORANDUM

To: Gregory J. Thorpe
Project Development & Environmental Analysis
North Carolina Department of Transportation

From: Jeffrey J. Crow, Deputy Secretary and State Historic Preservation Officer *JJC*

Re: US 70 Improvements from Radio Island to North of Beaufort, R-3307,
Carteret County, ER99-7954

We have reviewed the Environmental Assessment (EA) for the above referenced project and offer the following comments.

The EA accurately reflects our findings of effect for the proposed undertaking:

- ◆ Alternates 1A and 1E will adversely affect the Beaufort Historic District and the Carteret County Home, properties listed in the National Register of Historic Places.
- ◆ Alternate 2A, 2D, and 2E will not adversely affect the Beaufort Historic District, but will adversely affect the Carteret County Home.
- ◆ The project alternatives will not affect the J.C. Stanley Grocery, Scotts Grocery, and the Ward-Hancock House.
- ◆ The project will not affect the National Register-eligible Bridge #29 over Gallant's Channel, if it is left in place. Removal of the bridge would be an adverse effect on the bridge and the historic district.

Given these findings of effect for the project, we recommend selection of Alternate 2A, 2D or 2 E. Having offered that recommendation, we would also note that the Carteret County Home was built as a residential facility and is still used as a bed and breakfast. As proposed the several alternatives, which will adversely affect the property, may also affect the use of the historic property by making it unfit for its historic use. Thus, mitigation measures outlined in a Memorandum of Agreement (MOA) for this property may need to be more than the standard treatments.

MAILING ADDRESS
4610 Mail Service Center
Raleigh, NC 27699-4610

Telephone
Fax

919-807-7280
919-733-8807

LOCATION
109 East Jones Street
Raleigh, NC 27601

If Bridge #29 is removed as part of this project, the adverse effect will also need to be addressed in the MOA. Among the mitigation measures we recommend are:

- ◆ Relocation of the bridge to a site at the Maritime Museum, and
- ◆ Continued public ownership and use of the bridge site and US 70 right-of-way that might otherwise be abandoned by the Department of Transportation (NCDOT).

In offering our recommendation on preferred alternatives, we recognize that the selection of Alternatives 2A-2E will affect the state-owned Maritime Museum, which is a part of the Department of Cultural Resources. We are, therefore, pleased to see that the Project Commitments take this property into consideration and commit NCDOT to coordination with us to consider the measures discussed in Section VII.C. Certainly, measures to minimize impacts on the museum property need to include, but not necessarily be limited to, those outlined in the EA.

We look forward to further consultation with you to address both the effects of the project on the historic resources of the area and the Maritime Museum property. Thank you for your time and consideration. If you have questions concerning this matter, please contact Renee Gledhill-Earley, environmental review coordinator, at 919-733-4763. In all future communication concerning this project, please cite the above-referenced tracking number.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Cc: Beaufort HPC
Maritime Museum
SCH

Lynda Clay, Chair
Thomas L. Steepy, Vice-Chair
William Holt Faircloth
Douglas W. Harris
Raymond N. Muns
Jonathan Robinson
District 1 Seat Vacant



John Langdon
Tel: (252) 728-8450
Fax: (252) 728-2092
johnl@carteretcountygov.org
www.carteretcountygov.org

**RESOLUTION
SUPPORTING GALLANTS CHANNEL BRIDGE (PROJECT R-3307)
AND
RECOMMENDED ALTERNATIVE CORRIDOR**

WHEREAS, transportation improvements are critical to the economy of Carteret County and the health, safety, and welfare of citizens within Carteret County; and

WHEREAS, the North Carolina Department of Transportation Project R-3307, locally known as the Gallants Channel Project, has been Carteret County's #1 Transportation Improvement Program (TIP) priority since 1994, and has been endorsed by the Carteret County Board of Commissioners, county municipalities, and the County Transportation Committee in FY 2000; and

WHEREAS, the current Carteret County Board of Commissioners agree that the Gallants Channel Project is critical to future transportation needs of Carteret County and North Carolina; and

WHEREAS, of the fourteen alternatives which were initially proposed, the current Alternative 2D, also known as the northern-most alternative, is the preferred route because of less impact on residential areas, existing business, the Beaufort Historic District, and the environment; and

WHEREAS, within Alternative 2D, there are concerns about the vista, local neighborhoods, and the NC Maritime Museum Village.

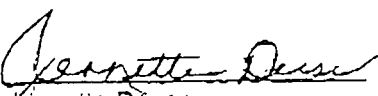
NOW, THEREFORE BE IT RESOLVED, to minimize the physical impact on the NC Maritime Museum Village and improve the vista of Historic Beaufort, we request the North Carolina Department of Transportation thoroughly evaluate and favorably consider a historic looking, mid-rise drawbridge over Gallants Channel, combined with a restricted bridge opening schedule; and

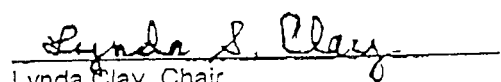
BE IT FURTHER RESOLVED, that we urge the North Carolina Department of Transportation to limit impact to the vista, local neighborhoods, and the NC Maritime Museum Village; and

BE IT FURTHER RESOLVED, that we encourage the North Carolina Department of Transportation to work to preserve and convey parcels of state-owned land at the existing Grayden Paul Bridge as potential parks for our citizens; and

FURTHER, BE IT RESOLVED, that the Carteret County Board of Commissioners, having selected Alternative 2D of the NC Department of Transportation Project R-3307, requests that the project be advanced to the Merger Team Review Process.

ADOPTED, this the 10th day of January 2005.


Jeanette Deese
Deputy Clerk to the Board


Lynda Clay, Chair
Carteret County Board of Commissioners

Appendix C
Merger / Concurrence Forms

**Section 404/ NEPA Interagency Agreement
Concurrence Point No. 3
Least Environmentally Damaging Practicable Alternative (LEDPA)**

Project Title: R-3307, Relocation of US 70, Beaufort, Carteret County, North Carolina, TIP No. R-3307, Federal-Aid Project No. STPNHF-70(43), State Project No. 8.1162501, Action ID 199800930.

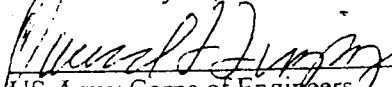
Project Description: The proposed project is to replace the existing US Highway 70 (US 70) drawbridge with a high-rise bridge and to extend the highway as a multilane facility from four lanes at Radio Island to north of Beaufort near Olga Road (SR 1429), Beaufort, Carteret County, North Carolina.

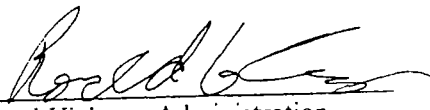
Concurrence Point 2 - Revised Alternatives to be Carried Forward: Based on updated information and environmental concerns, the alternatives are revised to include Alternatives 1A, 1E, 2A, 2D, 2E as shown in the Environmental Assessment dated October 2004. The Alternative 2 alignments include a connector using existing Turner Street, and the Alternative 1 alignments include a connector using West Beaufort Road and Turner Street.


Concurrence Point 2A - Bridging: Bridges will be constructed over Gallants Channel and Town Creek.

Concurrence Point 3 - LEDPA/ Preferred Alternative Selection: The project team has unconditionally concurred with alternative 2D to be carried forward as the LEDPA for concurrence point number 3. All of the alternatives considered, except the no-build alternative, meet the purpose and need of the proposed project.

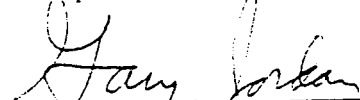
Date February 17, 2005


US Army Corps of Engineers

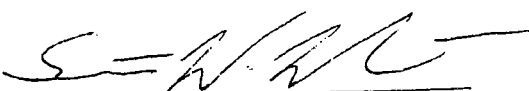

Federal Highway Administration

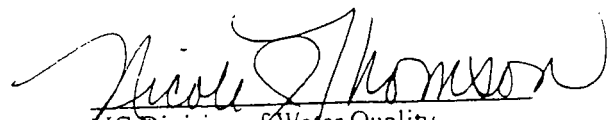

NC Department of Transportation

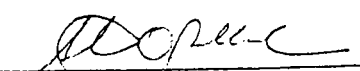

US Environmental Protection Agency

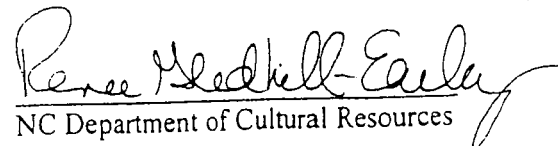

US Fish & Wildlife Service

National Marine Fisheries Service


NC Wildlife Resources Commission


NC Division of Water Quality


NC Division of Coastal Management


NC Department of Cultural Resources

NC Division of Marine Fisheries

**Section 404/ NEPA Interagency Agreement
Concurrence Point No. 4
Avoidance and Minimization**


Project Title: R-3307, Relocation of US 70, Beaufort, Carteret County, North Carolina, TIP No. R-3307, Federal-Aid Project No. STPNHF-70(43), State Project No. 8.1162501, Action ID 199800930.


Project Description: The proposed project is to replace the existing US Highway 70 (US 70) drawbridge with a high-rise bridge and to extend the highway as a multilane facility from four lanes at Radio Island to north of Beaufort near Olga Road (SR 1429), Beaufort, Carteret County, North Carolina.

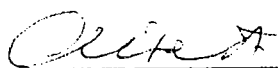
Concurrence Point 4 – Avoidance and Minimization: The project team has unconditionally concurred with alternative 2D to be carried forward as the LEDPA. In addition to alternative 2D, the merger team agreed to concur on alternative 2D-A to minimize impacts to the human environment by reducing the number of relocated residences in the vicinity of wetland site O. Alternative 2D in conjunction with 2D-A meets the purpose and need of the proposed project. The length for the bridge over Gallants Channel will be 3362 ft with a vertical clearance of 66 ft. A bridge will be constructed to replace the structure on Turner Street. The length of the Turner Street bridge will be 580 ft or longer. Wetland sites B, C, E, F, I, J, L, M and N will be avoided. Coordination between the NCDOT and the Carteret County Home will continue to take place to address indirect impacts to the historic property. NCDOT will utilize 3:1 slopes for construction within wetlands.

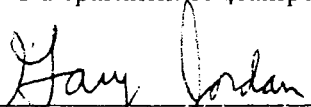
Date November 17, 2005


US Army Corps of Engineers

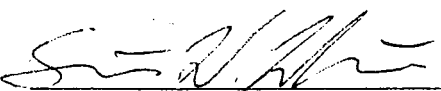

Federal Highway Administration


NC Department of Transportation


US Environmental Protection Agency


US Fish & Wildlife Service

National Marine Fisheries Service


NC Wildlife Resources Commission


NC Division of Water Quality


NC Division of Coastal Management


NC Department of Cultural Resources

NC Division of Marine Fisheries

Appendix D
Memorandum of Agreement



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

August 15, 2006

John F. Sullivan, III
Division Administrator
Federal Highway Administration
Department of Transportation
310 New Bern Avenue
Raleigh, NC 27601

Dear Mr. Sullivan:

RE: **Memorandum of Agreement (MOA)**, US 70 Improvements from Four Lanes at Radio Island to North of Beaufort near Olga Road (SR 1429), Beaufort, Carteret County, North Carolina, TIP No. R-3307, State Project No. 8.1162501, Federal Aid No. STPNHF-70(43).

The above-referenced project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and implemented by the Advisory Council on Historic Preservation's regulations for compliance codified at 36 CFR Part 800. Enclosed is the Memorandum of Agreement (MOA) required for the resolution of adverse effects.

After consultation with the North Carolina State Historic Preservation Office, it was determined that the subject project would have an adverse effect on the Carteret County Home, a property listed in the National Register of Historic Places. Removal of Bridge No. 29, determined eligible for the National Register, would result in an adverse effect. Subsequently, a MOA has been prepared to mitigate the effects of the proposed undertaking on the historic properties present. **Please review and sign the MOA and forward it to the Advisory Council for their files.** This filing is the formal conclusion of the Section 106 process and must occur before the undertaking is approved. After the ACHP has notified your office of the MOA filing, please provide a copy of the correspondence for our records.

If you have any questions concerning the accompanying information, please contact Richard Silverman, Historic Architecture Group, at (919) 715-1618.

Sincerely,

A handwritten signature in black ink, appearing to read "Carl B. Goode".

Carl B. Goode, P.E., Unit Head
Human Environment Unit

CBG/rls
Attachments

cc: Rob Hanson, P.E., Project Development Unit Head

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
HUMAN ENVIRONMENT UNIT
1583 MAIL SERVICE CENTER
RALEIGH NC 27699-1583

TELEPHONE: 919-715-1500
FAX: 919-715-1522

WEBSITE: WWW.NCDOT.ORG

LOCATION:
PARKER LINCOLN BUILDING
2728 CAPITAL BOULEVARD, SUITE 168
RALEIGH, NC 27604

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL HIGHWAY ADMINISTRATION
AND
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
US 70 IMPROVEMENTS FROM FOUR LANES AT RADIO ISLAND TO
NORTH OF BEAUFORT NEAR OLGA ROAD (SR 1429)
TIP # R-3307
BEAUFORT, CARTERET COUNTY, NC**

WHEREAS, the Federal Highway Administration (FHWA) has determined that the US 70 Improvements from four lanes at Radio Island to north of Beaufort near Olga Road in Carteret County, R-3307, (the Undertaking) will have an adverse effect upon the Carteret County Home, a property listed in the National Register of Historic Places, and Bridge # 29, a property determined eligible for listing in the National Register; and

WHEREAS, FHWA has consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the North Carolina Department of Transportation (NCDOT), the Town of Beaufort's Historic Preservation Commission (Commission), North Carolina Maritime Museum (Museum), and Owners of the Carteret County Home (Owners) participated in the consultation and have been invited to concur in this Memorandum of Agreement (Agreement),

NOW, THEREFORE, FHWA and the North Carolina SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on the historic properties.

STIPULATIONS

FHWA will ensure that the following measures are carried out:

I. Carteret County Home

Prior to the initiation of construction, NCDOT shall record the existing condition of the Carteret County Home and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix A) and submit the results to the North Carolina SHPO so there is a permanent record of the property.

If, prior to the completion of the project, the Owners of the Carteret County Home donate the building for relocation to a qualified preservation organization, such as Preservation North Carolina, NCDOT will provide funding up to \$75,000 to the preservation organization to assist in the move of the building to a new site within Carteret County. In

consideration of such assistance, the preservation organization shall ensure that covenants are placed on the building to require its rehabilitation and preservation in perpetuity.

II. Bridge # 29 (US 70) at Gallants Channel

Prior to the initiation of construction, NCDOT shall record the existing condition of Bridge # 29 and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix B) and submit the results to the North Carolina SHPO so there is a permanent record of the bridge.

NCDOT, in accordance with its Bridge Reuse and Relocation program, shall transfer Bridge # 29 to the Museum.

Upon transfer of title, the Museum will accept legal and financial responsibility for the bridge, including title, liability, and maintenance. The Museum will hold harmless NCDOT and FHWA in any liability action. The Museum will keep intact the historic fabric of the bridge.

The NCDOT, SHPO, and Museum will explore opportunities and other means, such as Transportation Enhancement funds, to further ensure the preservation of the bridge and its use as an educational element within the Museum's Gallants Channel campus.

III. Use of Bridge # 29 Site Following Removal of the Bridge

NCDOT will consult with the SHPO, Town of Beaufort, and North Carolina Wildlife Resources Commission (WRC) to develop and implement a plan for the future public use of the Bridge # 29 site, including approaches in the Town of Beaufort that constitute the US 70 right-of-way. Thereafter, a Memorandum of Understanding (MOU) may be developed between NCDOT, Town of Beaufort, SHPO, and WRC, if it agrees to participate, to provide a detailed plan for future public use.

NCDOT shall ensure that an interpretative display, about the presence and history of Bridge # 29 on its original site and directions to its new site, is installed within the public use area.

IV. Turner Street Improvements

As part of the subject project, improvements along Turner Street within the Beaufort Historic District will be completed within the existing right-of-way. No additional right-of-way will be obtained.

No more than three lanes will result from any lane reconfigurations on Turner Street within the Beaufort Historic District.

Any section of existing sidewalk on Turner Street within the Beaufort Historic District affected by construction will be replaced.

NCDOT will consult with the SHPO to address the design options for the proposed new bridge on Turner Street over Town Creek.

V. New Bridge over Gallants Channel

NCDOT will consult with SHPO to address the design options for the proposed new bridge over Gallants Channel to limit visual and audible impacts on the National Register-listed Beaufort Historic District.

VI. Unanticipated Discovery

In accordance with 36 CFR 800.11(a), and prior to initiation of construction activities, NCDOT shall ensure preparation of a plan of action should archaeological or architectural resources be inadvertently or accidentally discovered during the construction phase of the project. The plan shall provide for an assessment of the significance of the discovery in consultation amongst NCDOT, FHWA, and the SHPO. Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70.

VII. Dispute Resolution

Should the North Carolina SHPO object within (30) days to any plans or documentation provided for review pursuant to this Agreement, FHWA shall consult with the North Carolina SHPO to resolve the objection. If FHWA or the North Carolina SHPO determines that the objection cannot be resolved, FHWA shall forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council). Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- A. Provide FHWA with recommendations, which FHWA will take into account in reaching a final decision regarding the dispute, or
- B. Notify FHWA that it will comment pursuant to 36 CFR Section 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by FHWA in accordance with 36 CFR Section 800.7 (c) (4) with reference to the subject of the dispute.

Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; FHWA's responsibility to carry out all the actions under this Agreement that are not the subject of the dispute will remain unchanged.

Execution of this Memorandum of Agreement by FHWA and the North Carolina SHPO, its subsequent filing with the Advisory Council on Historic Preservation, and implementation of its terms evidence that FHWA has afforded the Council an opportunity to comment on the Undertaking and its effects on the Carteret County Home, Bridge # 29, and the Beaufort Historic District, and that FHWA has taken into account the effects of the Undertaking on the historic properties.

AGREE:

Clarence W. Colera, Jr.

FEDERAL HIGHWAY ADMINISTRATION

9/7/06

DATE

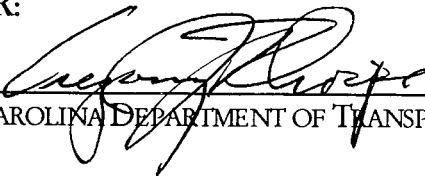
Jeffrey J. Cron

NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER

7/7/06

DATE

CONCUR:



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

17 July 06

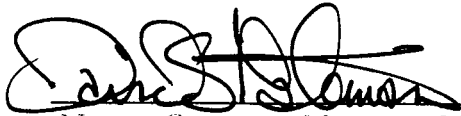
DATE

CONCUR:

TOWN OF BEAUFORT/BEAUFORT HISTORIC PRESERVATION COMMISSION

DATE

CONCUR:



NORTH CAROLINA MARITIME MUSEUM

7/27/06
DATE

CONCUR:

OWNERS, CARTERET COUNTY HOME BED & BREAKFAST

DATE

APPENDIX A

Historic Structures and Landscape Recordation Plan for
CARTERET COUNTY HOME
US 70 Improvements from Four Lanes at Radio Island to
North of Beaufort near Olga Road (SR 1429)
Beaufort, Carteret County, North Carolina
TIP # R-3307

Photographic Requirements

- Overall views of the Carteret County Home complex, showing the relationship of the buildings to setting
- Overall views of the buildings (elevations and oblique views)
- Selected photographic views of the buildings, including architectural details
- Views from the edge of roadway

Photographic Format

- Color slides (all views)
- 35 mm or larger black and white negatives (all views)
- Two (2) sets of black and white contact sheets (all views)
- All processing to be done to archival standards
- All photographs and negatives to be labeled according to Division of Archives and History standards

Copies and Curation

- One (1) set of all photographic documentation will be deposited with the North Carolina Division of Archives and History/State Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.
- One contact sheet shall be deposited in the files of the Historic Architecture Section of NCDOT.

APPENDIX B

Historic Structures and Landscape Recordation Plan for
BRIDGE # 29 OVER GALLANTS CHANNEL
US 70 Improvements from Four Lanes at Radio Island to
North of Beaufort near Olga Road (SR 1429)
Beaufort, Carteret County, North Carolina
TIP # R-3307

Photographic Requirements

- Overall views of the project area, showing the relationship of the bridge to setting
- Overall views of the bridge (elevations and oblique views)
- Selected photographic views of the bridge, including details of the connections and bridge plate (if present)
- Views under the bridge – as accessible
- Views of the bridge approaches in Morehead City and Town of Beaufort

Photographic Format

- Color slides (all views)
- 35 mm or larger black and white negatives (all views)
- Two (2) sets of black and white contact sheets (all views)
- All processing to be done to archival standards
- All photographs and negatives to be labeled according to Division of Archives and History standards

Copies and Curation

- One (1) set of all photographic documentation will be deposited with the North Carolina Division of Archives and History/State Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.
- One contact sheet shall be deposited in the files of the Historic Architecture Section of NCDOT.

Appendix E
Programmatic Section 4(f)

NORTH CAROLINA DIVISION
FINAL NATIONWIDE SECTION 4(f) EVALUATION AND APPROVAL
FOR FEDERALLY-AIDED HIGHWAY PROJECTS
THAT NECESSITATE THE USE OF HISTORIC BRIDGES

F. A. Project	<u>STPNHF-70(43)</u>
State Project	<u>8.1162501</u>
T. I. P. No.	<u>R-3307</u>

Description: From four lanes at Radio Island to North of Beaufort Near Olga Road (SR 1429) Beaufort, Carteret County (includes replacement of national register eligible Bridge No. 29 over Gallants Channel)

- | | <u>Yes</u> | <u>No</u> |
|---|--------------------------|--------------------------|
| 1. Is the bridge to be replaced or rehabilitated with Federal funds? | <u>X</u> | <input type="checkbox"/> |
| 2. Does the project require the use of a historic bridge structure which is on or eligible for listing on the National Register of Historic Places? | <u>X</u> | <input type="checkbox"/> |
| 3. Is the bridge a National Historic Landmark? | <input type="checkbox"/> | <u>X</u> |
| 4. Has agreement been reached among the FHWA, the State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) through procedures pursuant to Section 106 of the National Historic Preservation Act (NHPA)? | <u>X</u> | <input type="checkbox"/> |

ALTERNATIVES CONSIDERED AND FOUND NOT TO BE FEASIBLE AND PRUDENT

The following alternatives were evaluated and found not to be feasible and prudent:

- | | <u>Yes</u> | <u>No</u> |
|--|--------------------------|--------------------------|
| 1. <u>Do nothing</u> | | |
| Does the "do nothing" alternative: | | |
| (a) correct the problem situation that caused the bridge to be considered deficient? | <input type="checkbox"/> | <u>X</u> |
| (b) pose serious and unacceptable safety hazards? | <u>X</u> | <input type="checkbox"/> |

Yes No

2. Build a new structure at a different location without affecting the historic integrity of the structure.

X ☐

(a) The following reasons were reviewed:
(circle, as appropriate)

- (i) The present bridge has already
been located at the only feasible
and prudent site

and/or (ii) Adverse social, environmental,
or economic impacts were noted

and/or (iii) Cost and engineering difficulties
reach extraordinary magnitude

and/or (iv) The existing bridge cannot be
preserved due to the extent of
rehabilitation, because no
responsible party will maintain
and preserve the historic bridge,
or the permitting authority
requires removal or demolition.

3. Rehabilitate the historic bridge without affecting the historic integrity of the structure.

X ☐

(a) The following reasons were reviewed:
(circle, as appropriate)

- (i) The bridge is so structurally
deficient that it cannot be
rehabilitated to meet the
acceptable load requirements
and meet National Register
criteria

and/or (ii) The bridge is seriously
deficient geometrically and
cannot be widened to meet the
required capacity and meet
National Register criteria

MINIMIZATION OF HARM

Yes No

1. The project includes all possible planning to minimize harm.

X

☐

2. Measures to minimize harm include the following: (circle, as appropriate)

a. For bridges that are to be rehabilitated, the historic integrity of the bridge is preserved to the greatest extent possible, consistent with unavoidable transportation needs, safety, and load requirements.

b. For bridges that are to be rehabilitated to the point that the historic integrity is affected or that are to be removed or demolished, the FHWA ensures that, in accordance with the Historic American Engineering Record (HAER) standards, or other suitable means developed through consultation, fully adequate records are made of the bridge.

c. For bridges that are to be replaced, the existing bridge is made available for an alternative use, provided a responsible party agrees to maintain and preserve the bridge.

d. For bridges that are adversely affected, agreement among the SHPO, ACHP, and FHWA is reached through the Section 106 process of the NHPA on measures to minimize harm and those measures are incorporated into the project.

3. Specific measures to minimize harm are discussed below:

See Memorandum of Agreement

Note: Any response in a box requires additional information prior to approval. Consult Nationwide 4(f) evaluation.

COORDINATION

The proposed project has been coordinated with the following (attach correspondence):

- | | |
|--|---|
| a. State Historic Preservation Officer | X |
| b. Advisory Council on Historic Preservation | X |
| c. Local/State/Federal Agencies | X |
| d. US Coast Guard | X |
| (for bridges requiring bridge permits) | |

SUMMARY AND APPROVAL

The project meets all criteria included in the programmatic 4(f) evaluation approved on July 5, 1983.

All required alternatives have been evaluated and the findings made are clearly applicable to this project.

There are no feasible and prudent alternatives to the use of the historic bridge. The project includes all possible planning to minimize harm, and there are assurances that the measures to minimize harm will be incorporated in the project.

All appropriate coordination has been successfully completed.

Approved:

_____	_____
Date	Manager, Planning & Environmental Branch
	NCDOT

_____	_____
Date	Division Administrator, FHWA

Appendix F
Guidelines for Avoiding Impacts to the West
Indian Manatee



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

GUIDELINES FOR AVOIDING IMPACTS TO THE WEST INDIAN MANATEE Precautionary Measures for Construction Activities in North Carolina Waters

The West Indian manatee (*Trichechus manatus*), also known as the Florida manatee, is a Federally-listed endangered aquatic mammal protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) and the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1461 *et seq.*). The manatee is also listed as endangered under the North Carolina Endangered Species Act of 1987 (Article 25 of Chapter 113 of the General Statutes). The U.S. Fish and Wildlife Service (Service) is the lead Federal agency responsible for the protection and recovery of the West Indian manatee under the provisions of the Endangered Species Act.

Adult manatees average 10 feet long and weigh about 2,200 pounds, although some individuals have been recorded at lengths greater than 13 feet and weighing as much as 3,500 pounds. Manatees are commonly found in fresh, brackish, or marine water habitats, including shallow coastal bays, lagoons, estuaries, and inland rivers of varying salinity extremes. Manatees spend much of their time underwater or partly submerged, making them difficult to detect even in shallow water. While the manatee's principal stronghold in the United States is Florida, the species is considered a seasonal inhabitant of North Carolina with most occurrences reported from June through October.

To protect manatees in North Carolina, the Service's Raleigh Field Office has prepared precautionary measures for general construction activities in waters used by the species. Implementation of these measure will allow in-water projects which do not require blasting to proceed without adverse impacts to manatees. In addition, inclusion of these guidelines as conservation measures in a Biological Assessment or Biological Evaluation, or as part of the determination of impacts on the manatee in an environmental document prepared pursuant to the National Environmental Policy Act, will expedite the Service's review of the document for the fulfillment of requirements under Section 7 of the Endangered Species Act. These measures include:

1. The project manager and/or contractor will inform all personnel associated with the project that manatees may be present in the project area, and the need to avoid any harm to these endangered mammals. The project manager will ensure that all construction personnel know the general appearance of the species and their habit of moving about completely or partially submerged in shallow water. All construction personnel will be informed that they are responsible for observing water-related activities for the presence of manatees.
2. The project manager and/or the contractor will advise all construction personnel that

there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act and the Endangered Species Act.

3. If a manatee is seen within 100 yards of the active construction and/or dredging operation or vessel movement, all appropriate precautions will be implemented to ensure protection of the manatee. These precautions will include the immediate shutdown of moving equipment if a manatee comes within 50 feet of the operational area of the equipment. Activities will not resume until the manatee has departed the project area on its own volition (i.e., it may not be herded or harassed from the area).

4. Any collision with and/or injury to a manatee will be reported immediately. The report must be made to the U.S. Fish and Wildlife Service (ph. 919.856.4520 ext. 16), the National Marine Fisheries Service (ph. 252.728.8762), and the North Carolina Wildlife Resources Commission (ph. 252.448.1546).

5. A sign will be posted in all vessels associated with the project where it is clearly visible to the vessel operator. The sign should state:

CAUTION: The endangered manatee may occur in these waters during the warmer months, primarily from June through October. Idle speed is required if operating this vessel in shallow water during these months. All equipment must be shut down if a manatee comes within 50 feet of the vessel or operating equipment. A collision with and/or injury to the manatee must be reported immediately to the U.S. Fish and Wildlife Service (919-856-4520 ext. 16), the National Marine Fisheries Service (252.728.8762), and the North Carolina Wildlife Resources Commission (252.448.1546).

6. The contractor will maintain a log detailing sightings, collisions, and/or injuries to manatees during project activities. Upon completion of the action, the project manager will prepare a report which summarizes all information on manatees encountered and submit the report to the Service's Raleigh Field Office.

7. All vessels associated with the construction project will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than a four foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

8. If siltation barriers must be placed in shallow water, these barriers will be: (a) made of material in which manatees cannot become entangled; (b) secured in a manner that they cannot break free and entangle manatees; and, (c) regularly monitored to ensure that manatees have not become entangled. Barriers will be placed in a manner to allow manatees entry to or exit from essential habitat.

